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S. HRG. 98-724
PART 1

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1985

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

S. 2414

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 1985 FOR THE ARMED FORCES FOR PROCUREMENT, FOR RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, FOR OPERATION AND MAINTENANCE, AND FOR WORKING CAPITAL FUNDS, TO PRESCRIBE PERSONNEL STRENGTH FOR SUCH FISCAL YEAR FOR THE ARMED FORCES AND FOR CIVILIAN EMPLOYEES OF THE DEPARTMENT OF DEFENSE, AND FOR OTHER PURPOSES

PART 1

U.S. MILITARY POSTURE

Secretary of Defense Caspar Weinberger
Gen. John W. Vessey, Jr., Chairman, Joint Chiefs of Staff

FEBRUARY 1, 1984

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1985

TUESDAY, FEBRUARY 1, 1984

U.S. Senate,
Committee on Armed Services,
Washington, D.C.

U.S. MILITARY POSTURE

The committee met in open session pursuant to notice, at 10:02 a.m., in room SR 325, Russell Senate Office Building, Senator John Tower (chairman) presiding.

Present: Senators Tower, Goldwater, Warner, Humphrey, Cohen, Jepsen, Quayle, Wilson, Stennis, Nunn, Exon, Levin, Kennedy, and Bingaman.

Staff present: James F. McGovern, staff director and chief counsel; Arnold L. Punaro, staff director for the minority; Alan R. Yuspeh, general counsel; Christine C. Dauth, chief clerk; Brenda K. Hudson, assistant chief clerk; Patrick A. Tucker, counsel; Ann E. Sauer, special assistant; Gerald D. Strickler, printing and documents clerk; L. Wayne Arny III, Michael B. Donley, Richard D. Finn, Jr., George K. Johnson, Jr., David S. Lyles, José E. Martinez, Bruce D. Porter, and Carl M. Smith, professional staff members; Mark B. Robinson, Judith A. Freedman, and Douglas R. Graham, research assistants; Marie Chaillet and Patricia L. Watson, staff assistants.

Also present: Gerald J. Smith, assistant to Senator Goldwater; John G. Campbell and Guy Copeland, assistants to Senator Warner; Ronald P. Kelley, assistant to Senator Humphrey; James H. Dykstra and Robert Savitt, assistants to Senator Cohen; Jon Etherton, assistant to Senator Jepsen; Henry J. Steenstra and Bernie Toom, assistants to Senator Quayle; John Roddy and Scott Fisher, assistants to Senator East; Mark J. Albrecht, assistant to Senator Wilson; Francis J. Sullivan and Mary A. Shields, assistants to Senator Stennis; Jeff Subko, assistant to Senator Exon; Peter D. Lennon, assistant to Senator Levin; Gregory B. Craig, Matthew H. Murray, and James Steinberg, assistants to Senator Kennedy; and Michael A. Fainberg, assistant to Senator Bingaman.

[The bill, S. 2414 follows:]

[S. 2414, 98th Congress, 2d Session]

A BILL To authorize appropriations for fiscal year 1985 for the Armed Forces for procurement, for research, development, test, and evaluation, for operation and maintenance, and for working capital funds, to prescribe personnel strengths for such fiscal year for the Armed Forces and for civilian employees of the Department of Defense, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Department of Defense Authorization Act, 1985".

TITLE I—PROCUREMENT

AUTHORIZATION OF APPROPRIATIONS, ARMY

Sec. 101. Funds are hereby authorized to be appropriated for fiscal year 1985 for procurement of aircraft, missiles, weapons, and tracked combat vehicles, and ammunition and for other procurement for the Army as follows:

For aircraft, $4,008,300,000.
For missiles, $3,442,400,000.
For weapons and tracked combat vehicles, $5,092,700,000.
For ammunition, $2,494,000,000.
For other procurement, $6,022,400,000.

AUTHORIZATION OF APPROPRIATIONS, NAVY AND MARINE CORPS

Sec. 102. (a) Funds are hereby authorized to be appropriated for fiscal year 1985 for procurement of aircraft, weapons (including missiles and torpedoes), shipbuilding and conversion, and other procurement for the Navy as follows:

For aircraft, $11,474,200,000.
For weapons (including missiles and torpedoes), $4,650,860,000.
For shipbuilding and conversion, $13,141,900,000.
For other procurement, $5,953,900,000.

(b) Funds are hereby authorized to be appropriated for fiscal year 1985 for procurement for the Marine Corps (including missiles, tracked combat vehicles, and other weapons) in the amount of $1,978,581,000.

AUTHORIZATION OF APPROPRIATIONS, AIR FORCE

Sec. 103. Funds are hereby authorized to be appropriated for fiscal year 1985 for procurement of aircraft and missiles and for other procurement for the Air Force as follows;

For aircraft, $28,676,500,000.
For missiles, $9,820,600,000.
For other procurement, $9,561,500,000.

AUTHORIZATION OF APPROPRIATIONS, DEFENSE AGENCIES

Sec. 105. Funds are hereby authorized to be appropriated for the Defense Agencies in the amount of $1,243,500,000.

CERTAIN AUTHORITY PROVIDED THE SECRETARY OF DEFENSE IN CONNECTION WITH THE NATO AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) PROGRAM

Sec. 106. Effective on October 1, 1984, section 103(c) of the Department of Defense Authorization Act, 1962 (Public Law 97-86; 95 Stat. 1100) is amended by striking out "fiscal year 1984" both places it appears and inserting in lieu thereof "fiscal year 1985".

TITLE II—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

AUTHORIZATION OF APPROPRIATIONS

Sec. 201. (a) Funds are hereby authorized to be appropriated for fiscal year 1985 for the use of the Armed Forces for research, development, test, and evaluation, in amounts as follows:

For the Army, $4,987,860,000.
For the Navy (including the Marine Corps), $9,833,576,000.
For the Air Force, $14,401,955,000.
For the Defense Agencies, $4,770,296,000, of which $62,000,000 is authorized for the activities of the Director of Test and Evaluation, Defense.

(b) In addition to the funds authorized to be appropriated in subsection (a), there are authorized to be appropriated for fiscal year 1985 such additional sums as may be necessary for increases in salary, pay, retirement, and other employee benefits authorized by law for civilian employees of the Department of Defense whose compensation is provided for by funds authorized to be appropriated in subsection (a).

TITLE III—OPERATION AND MAINTENANCE

SEC. 301. (a) Funds are hereby authorized to be appropriated for fiscal year 1985 for the use of the Armed Forces of the United States and other activities and agencies of the Department of Defense for expense, not otherwise provided for, for operation and maintenance, in amounts as follows:

For the Army, $19,486,518,000.
For the Navy, $26,248,426,000.
For the Marine Corps, $1,683,069,000.
For the Air Force, $20,234,500,000.
For the Defense Agencies, $7,338,370,000.
For the Army Reserve, $715,450,000.
For the Naval Reserve, $829,531,000.
For the Marine Corps Reserve, $58,642,000.
For the Air Force Reserve, $883,461,000.
For the Army National Guard, $1,404,643,000.
For the Air National Guard, $1,862,148,000.
For the National Board for the Promotion of Rifle Practice, $914,000.
For the Defense Claims, $177,900,000.
For the Court of Military Appeals, $3,470,000.

(b) There are authorized to be appropriated for fiscal year 1985, in addition to the amounts authorized to be appropriated in subsection (a), such sums as may be necessary—

(1) for increases in salary, pay, retirement, and other employee benefits authorized by law for civilian employees of the Department of Defense whose compensation is provided for by funds authorized to be appropriated in subsection (a);

(2) for unbudgeted increases in fuel costs; and

(3) for increases as the result of inflation in the cost of activities authorized by subsection (a).

TITLE IV—WORKING CAPITAL FUNDS

SEC. 401. Funds are hereby authorized to be appropriated for fiscal year 1985 for the use of the Armed Forces of the United States and other activities and agencies of the Department of Defense for providing capital for working-capital funds, in amounts as follows:

For the Army Stock Fund, $366,448,000.
For the Navy Stock Fund, $563,907,000.
For the Marine Corps Stock Fund, $34,908,000.
For the Air Force Stock Fund, $666,093,000.
For the Defense Stock Fund, $130,700,000.

TITLE V—ACTIVE FORCES

SEC. 501. The Armed Forces are authorized strengths for active duty personnel as of September 30, 1985, as follows:

(1) The Army, 780,800.
(2) The Navy, 575,300.
(3) The Marine Corps, 199,500.
(4) The Air Force, 610,200.

TITLE VI—RESERVE FORCES

AUTHORIZATION OF AVERAGE STRENGTHS FOR SELECTED RESERVE

SEC. 601. For fiscal year 1985 the Selected Reserve of the reserve components of the Armed Forces shall be programed to attain average strengths of not less than the following:

(1) The Army National Guard of the United States, 440,100.
(2) The Army Reserve, 288,400.
(3) The Naval Reserve, 124,200.
(4) The Marine Corps Reserve, 44,300.
(5) The Air National Guard of the United States, 106,200.
(6) The Air Force Reserve, 72,900.
(7) The Coast Guard Reserve, 12,500.

(b) The average strengths prescribed by subsection (a) for the Selected Reserve of any reserve component shall be proportionately reduced by (1) the total authorized strength of units organized to serve as units of the Selected Reserve of such component which are on active duty (other than for training) at any time during the fiscal year, and (2) the total number of individual members not in units organized to serve as units of the Selected Reserve of such component who are on active duty (other than for training or for unsatisfactory participation in training) without their consent at any time during the fiscal year. Whenever such units or such individual members are released from active duty during any fiscal year, the average strength prescribed for such fiscal year for the Selected Reserve of such reserve component shall be proportionately increased by the total authorized strength of such units and by the total number of such individual members.

AUTHORIZATION OF END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES

SEC. 602. (a) Within the average strengths prescribed in section 601, the reserve components of the Armed Forces are authorized, as of September 30, 1985, the following number of Reserves to be serving on full-time active duty or full-time duty, in the case of members of the National Guard, for the purpose of organizing, administering, recruiting, instructing, or training the reserve components:

(1) The Army National Guard of the United States, 26,583.
(2) The Army Reserve, 15,027.
(3) The Naval Reserve, 15,410.
(4) The Marine Corps Reserve, 1,129.
(5) The Air National Guard of the United States, 7,224.
(6) The Air Force Reserve, 623.

(b) Upon a determination by the Secretary of Defense that such action is in the national interest, the end strengths prescribed by subsection (a) may be increased by a total of not more than the number equal to 2 per centum of the total end strengths prescribed.

INCREASE IN NUMBER OF CERTAIN PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY IN SUPPORT OF THE RESERVE COMPONENTS

SEC. 603. (a) The table in section 517(b) of title 10, United States Code, is amended to appear as follows:

"Grade	Army	Navy	Air Force	Marine Corps
E-9	517	156	87	9
E-8	2,295	381	455	74".

(b) The table in section 524(a) of such title is amended to appear as follows:

"Grade	Army	Navy	Air Force	Marine Corps
Major or Lieutenant Commander	2,261	823	471	100
Lieutenant Colonel or Commander	1,121	520	293	50
Colonel or Navy Captain	345	177	172	25".

(b) The amendments made by subsections (a) and (b) take effect on October 1, 1984.

TITLE VII—CIVILIAN PERSONNEL

AUTHORIZATION OF END STRENGTH

SEC. 701. (a) The Department of Defense is authorized a strength in civilian personnel, as of September 30, 1985, of 1,084,836.

(b) The strength for civilian personnel prescribed in subsection (a) shall be apportioned among the Department of the Army, the Department of the Navy, the Department of the Air Force, and the agencies of the Department of Defense (other than the military departments) in such numbers as the Secretary of Defense shall prescribe. The Secretary of Defense shall report to the Congress within sixty days after the date of enactment of this Act on the manner in which the initial allocation of civilian personnel is made among the military departments and the agencies of the Department of Defense (other than the military departments) and shall include the rationale for each allocation.

(c)(1) In computing the strength for civilian personnel, there shall be included all direct-hire and indirect-hire civilian personnel employed to perform military functions administered by the Department of Defense (other than those performed by the National Security Agency) whether employed on a full-time, part-time, or intermittent basis, but excluding special employment categories for students and disadvantaged youth such as the stay-in-school campaign, the temporary summer aid program and the Federal junior fellowship program and personnel participating in the worker-trainee opportunity program.

(2) Personnel employed under a part-time career employment program established under section 3402 of title 5, United States Code, shall be counted as prescribed in section 3404 of that title. Personnel employed in an overseas area on a part-time basis under a nonpermanent local-hire appointment who are dependents accompanying a Federal civilian employee or a member of a uniformed service on official assignment or tour of duty shall also be counted as prescribed in section 3404 of that title.

(3) Whenever a function, power or duty, or activity is transferred or assigned to a department or agency of the Department of Defense from a department or agency outside of the Department of Defense or from another department or agency within the Department of Defense, the civilian personnel end-strength authorized for such departments or agencies of the Department of Defense affected shall be adjusted to reflect any increase or decreases in civilian personnel required as a result of such transfer or assignment.

(d) When the Secretary of Defense determines that such action is necessary in the national interest, the Secretary of Defense may authorize the employment of civilian personnel in excess of the number authorized by subsection (a), but such additional number may not exceed 2 per centum of the total number of civilian personnel authorized for the Department of Defense by subsection (a). The Secretary of Defense shall promptly notify the Congress of any authorization to increase civilian personnel strength under this subsection.

TITLE VIII—MILITARY TRAINING STUDENT LOADS

AUTHORIZATION OF TRAINING STUDENT LOADS

SEC. 801. (a) For fiscal year 1985, the components of the Armed Forces are authorized average military training student loads as follows:

(1) The Army, 76,920.
(2) The Navy, 69,116.
(3) The Marine Corps, 21,186.
(4) The Air Force, 46,592.
(5) The Army National Guard of the United States, 18,338.
(6) The Army Reserve, 15,994.
(7) The Naval Reserve, 3,389.
(8) The Marine Corps Reserve, 3,941.
(9) The Air National Guard of the United States, 2,990.
(10) The Air Force Reserve, 2,099.

(b) The average military student loads for the Army, the Navy, the Marine Corps, and the Air Force and the reserve components authorized in subsection (a) for fiscal year 1985 shall be adjusted consistent with the manpower strengths authorized in titles V, VI, and VIII of this Act. Such adjustment shall be apportioned among the Army, the Navy, the Marine Corps, and the Air Force and the reserve components in such manner as the Secretary of Defense shall prescribe.

TITLE IX—GENERAL PROVISIONS

SELECTED ACQUISITION REPORTS AMENDMENTS

SEC. 901. (a) Section 139a of title 10, United States Code is amended—

(1) by striking out subsection (a)(1) and inserting in lieu thereof the following:

"(1) 'Major defense acquisition program' means a Department of Defense acquisition program that has a firm program baseline and cost estimate, that has received congressionally approved funding and a Department decision to proceed with full-scale engineering development, that is not a highly sensitive classified program (as determined by the Secretary of Defense) and—

"(A) that is designated by the Secretary of Defense as a major defense acquisition program; or

"(B) that is estimated by the Secretary of Defense to require an eventual total expenditure for research, development, test, and evaluation of more than $200,000,000 (based on fiscal year 1980 constant dollars) or an eventual total expenditure for procurement of more than $1,000,000,000 (based on fiscal year 1980 constant dollars).";

(2) by striking out "appropriated" the first two times it appears in subsection (a)(3);

(3) by inserting "in excess of $5,000,000" between "the program" and "in dollar amount." in subsection (a)(4);

(4) by striking out subsection (b)(2) and inserting in lieu thereof the following:

"(2) A status report on a major defense acquisition program need not be included in the Selected Acquisition Report for the second, third, or fourth quarter of a fiscal year if such a report was included in a previous Selected Acquisition Report for the fiscal year and during the period since that report there has been:

"(A) Less than a 5 per centum change in total program costs; or

"(B) Less than a 5 per centum change in program performance; or

"(C) Less than a six-month delay in any program schedule milestones.";

(5) by striking out subsection (f) and inserting in lieu thereof the following:

"(f) Each comprehensive annual Selected Acquisition Report shall be submitted within sixty days after the date on which the President transmits the Budget to Congress for the following fiscal year, and each Quarterly Selected Acquisition Report shall be submitted within forty-five days after the end of the fiscal-year quarter."; and

(6) by adding the following subsection at the end thereof:

"(g) Reporting on this section shall apply to a major defense acquisition program until 90 per centum of planned deliveries have been made or 90 per centum of planned expenditures have been incurred.".

(b) The amendments made by this section shall take effect on January 1, 1985, and shall apply beginning with respect to reports for the first quarter of fiscal year 1985.

UNIT COST REPORT AMENDMENT

SEC. 902. (a) Section 139b of title 10, United States Code is amended—

(1) by striking out subsection (a)(2) and inserting in lieu thereof the following:

"(2) 'Baseline Selected Acquisition Report', with respect to a unit cost report that is submitted under this section to the Secretary concerned on a major defense acquisition program, means the first comprehensive annual Selected Acquisition Report prepared subsequent to the award of the first production contract or the comprehensive annual Selected Acquisition Report for the fiscal year immediately before the fiscal year containing the quarter with respect to which the unit cost report is submitted, whichever is later.";

(2) by adding at the end of subsection (a) the following:

"(4) 'Baseline Report', with respect to a unit cost report that is submitted under this section to the Secretary concerned on a major defense acquisition program, means:

"(A) the Baseline Selected Acquisition Report when no report has been submitted under either subsection (e)(1) or (e)(2)(B)(ii) during the second, third, or fourth fiscal-year quarter of the preceding fiscal year; or

"(B) The unit cost report required by subsection (e)(2)(B)(ii) whenever submitted during the second, third, or fourth fiscal-year quarter of the preceding fiscal year; or

"(C) The unit cost report required by subsection (e)(1) whenever submitted during the second, third, or fourth fiscal-year quarter of the preceding fiscal year, and no report has been submitted under subsection (e)(2)(B)(ii) during the same three-quarter period.";

(3) by striking out subsection (b) and inserting in lieu thereof the following:

"(b) The program manager for a defense acquisition program that as of the end of a fiscal-year quarter is a major defense acquisition program (other than a program not required to be included in the Selected Acquisition Report for that quarter under section 139a(b)(3) of this title) shall, after the end of each fiscal-year quarter, submit to the Secretary concerned a written report on the unit cost of the program. Each report for the first quarter of a fiscal year shall be submitted not more than seven days after the date on which the President transmits the budget to Congress for the following fiscal year. Each report for all other quarters shall be submitted not more than seven days after the end of that quarter. The program manager shall include in each such unit cost report the following information with respect to the program (as of the last day of the quarter for which the report is made):

"(1) The program acquisition unit cost in constant base-year dollars and in current dollars.

"(2) In the case of a procurement program, the procurement unit cost in constant base-year dollars and in current dollars.

"(3) Any cost variance or schedule variance in a major contract under the program since the Baseline Report was submitted.

"(4) Any changes from program schedule milestones or program performances reflected in the Baseline Selected Acquisition Report that are known, expected, or anticipated by the program manager.";

(4) subsection (c) is amended by—

(A) striking out clauses (1) (A) and (B) and inserting in lieu thereof the following:

"(A) that the program acquisition unit cost expressed in constant base-year dollars for the program has increased by more than 15 per centum over the program acquisition unit cost for the program as shown in the Baseline Report;".

"(B) in the case of a major defense acquisition program that is a procurement program, that the current procurement unit cost expressed in constant base-year dollars for the program has increased by more than 15 per centum over the procurement unit cost for the program as reflected in the Baseline Report; or";

(B) striking out "of" in clause (2)(A) and inserting in lieu thereof: "expressed in constant base-year dollars for";

(C) inserting "expressed in constant base-year dollars" immediately before "for the program" in subsection (c)(2)(B);

(5) subsection (d) is amended—

(A) by striking out clauses (1) and (2) and inserting in lieu thereof the following:

"(1) When a unit cost report is submitted to the Secretary concerned under this section with respect to a major defense acquisition program, the Secretary shall determine whether the current program acquisition unit cost expressed in constant base-year dollars for the program has increased by more than 15 per centum, or by more than 25 per centum, over the program acquisition unit cost for the program as shown in the Baseline Report.

"(2) When a unit cost report is submitted to the Secretary concerned under this section with respect to a major defense acquisition program that is a procurement program, the Secretary concerned shall, in addition to the determination under paragraph (1), determine whether the current procurement unit cost expressed in constant base-year dollars for the program has increased by more than 15 per centum, or by more than 25 per centum, over the procurement unit cost for the program as reflected in the Baseline Report.";

(B) by inserting immediately before "has increased' each time it appears in clause (3) the following: "expressed in constant base-year dollars";

(C) by striking out clause (3)(B) and inserting in lieu thereof the following:

"(B) except as provided in subsection (e), additional military construction; research, development, test, and evaluation; or procurement funds may not be obligated for acquisition contracts for the procurement of facilities, developed prototypes, or hardware for such defense acquisition programs—

"(i) after the end of the thirty-day period beginning on the day on which the Secretary makes such a determination, in the case of a percentage of more than 15 per centum; or

"(ii) after the end of the sixty-day period beginning on the day on which the Secretary makes such a determination, in the case of a percentage increase of more than 25 per centum.";

(6) subsection (e) is amended—

(A) by inserting "(i)" immediately after "(d)(3)(B)"; by inserting "more than" immediately before "15 percent" and by striking out "(g)" and inserting in lieu thereof "(f)" in clause (1);

(B) by inserting "(ii)" immediately before "(d)(3)(B)" and by inserting "more than" immediately before "25 percent" in clause (2);

(C) by striking out clause (2)(A) and inserting in lieu thereof the following:

"(A) if the increase was due to termination or cancellation of the acquisition program or due to changes in the planned program as a result of congressional action, and the Secretary concerned submits to Congress, before the end of the thirty-day period referred to in such subsection, a report containing the information described in subsection (f); or";

(D) by striking out "(g)" in clause 2(B)(ii) and inserting in lieu thereof "(f)"; and

(E) by striking out clause (3) and inserting in lieu thereof the following:

"(3) The prohibition in subsection (d)(3)(B) on the obligation of funds for a major defense acquisition program shall cease to apply when the Secretary concerned submits the report as provided under subsection (e)(1) in the case of determination of a more than 15 per centum increase (as determined under subsection (d), or the Secretary concerned submits the report as provided under subsection (e)(1) and the Secretary of Defense submits the report as provided under subsection (e)(2)(B) in the case of a more than 25 per centum increase (as determined under subsection (d))).";

(7) by striking out subsection (f);

(8) by redesignating subsection (g) as subsection (f) and by amending subsection (f) as redesignated by this section—

(A) by striking out clause (I) and inserting in lieu thereof the following:

"(I) The type and date of the Baseline Report.";

(B) by striking out clause (K) and inserting in lieu thereof the following:

"(K) The current change and the total change, in dollars and expressed as a percentage, in the procurement unit cost, stated both in constant base-year dollars and in current dollars and the procurement unit cost for the succeeding fiscal year expressed in constant base-year dollars and in current-year dollars."; and

(C) by inserting "or due to changes in the planned program as a result of congressional action" immediately after "the entire program" in clause (2); and

(9) by adding the following subsection at the end thereof:

"(h) This section shall not apply to major defense acquisition programs until the first quarter of the fiscal year following the fiscal year in which the first production contract is awarded for the program.".

(b) The amendments made by this section shall take effect on January 1, 1985, and shall apply beginning with respect to reports for the first quarter of fiscal year 1985.

NAVY STOCK FUND CREDITS

SEC. 903. Notwithstanding the last sentence of section 2208(g) of title 10, United States Code, withdrawal credits may be issued to customer accounts in connection with the capitalization of aviation depot level repairable assets.

CONTINUED OPERATION BY THE SECRETARY OF DEFENSE OF THE DEFENSE DEPENDENTS' EDUCATION SYSTEM

SEC. 904. (a)(1) Sections 208 and 302, subsection (e) of section 202 and subsection (f) of section 401 of the Department of Education Organization Act (20 U.S.C. 3418, 3442, 3412(e), and 3461(f) are repealed.

(2) Section 419(a) of such Act (20 U.S.C. 3478(a)) is amended—

(A) by striking out "(1)" after the subsection designation "(a)", and

(B) by striking out paragraph (2).

(3) Section 503(a) of such Act (20 U.S.C. 3503(a)) is amended—

(A) by striking out "(1)" after the subsection designation "(a)", and

(B) by striking out clause (2).

(4) The table of contents at the beginning of such Act is amended by striking out the items relating to sections 208 and 302.

(5) Section 414(b) of such Act (20 U.S.C. 3474(b)) is amended by striking out "302".

(6) Section 508(f) of such Act (5 U.S.C. 5316) is amended by striking out "(38) Administrator of Education for Overseas Dependents, Department of Education".

(b) The second sentence of section 1410(b) of the Defense Dependents' Education Act of 1978 (20 U.S.C. 928(b)) is amended by striking out "The Secretary of Education, in consultation with the Secretary of Defense" and inserting in lieu thereof "The Secretary of Defense".

(c) Section 1402 of the Department of Defense Education Act of 1978 (20 U.S.C. 921) is amended by inserting the following new subsection:

"(c) The Secretary of Defense, in his discretion, may request the Secretary of Education to provide information, advice, and technical support concerning educational programs and practices.".

(d) Section 1411(a) of the Department of Defense Education Act of 1978 (20 U.S.C. 929(a)) is amended to read as follows:

"(a) There is established in the Department of Defense an Advisory Council on Dependents' Education (hereinafter in this section referred to as the 'Council'). The Council shall be composed of—

"(1) the Assistant Secretary of Defense for Manpower, Installations, and Logistics (hereinafter in this section referred to as the 'Assistant Secretary'), who shall be the Chairman of the Council;

"(2) twelve individuals appointed by the Assistant Secretary, who shall be individuals who have demonstrated an interest in the field of primary or secondary education and who shall include representatives of professional employee organizations, school administrators, sponsors of students enrolled in the defense dependents' education system, and one student enrolled in such system.

"(3) representatives from overseas military commands and from educational institutions as designated by the Assistant Secretary; and

"(4) one individual appointed by the Secretary of Education.

The Director shall be the Executive Secretary of the Council".

(e) Section 1411(b)(1) of such Act (20 U.S.C. 929(b)(1)) is amended by striking out "Secretary of Education" and inserting in lieu thereof "Assistant Secretary".

(f) Section 1411(c) of such Act (20 U.S.C. 929(c)) is amended—

(1) by striking out "at least four times each year" and inserting in lieu thereof "not more than four times each year";

(2) by striking out clause (2);

(3) by redesignating clauses (3), (4), and (5) as clauses (2), (3), and (4), respectively; and

(4) by striking out "Secretary of Education" in clause (4) (as redesignated in clause (3) of this subsection) and inserting in lieu thereof "Assistant Secretary".

RECIPROCAL COMMUNICATIONS SUPPORT

SEC. 905. (a) Chapter 141 of title 10, United States Code is amended by adding at the end thereof the following:

§ 2401. Reciprocal communications support

"(a) The Secretary of Defense, subject to the concurrence of the Secretary of State, may enter into an agreement with the government of any alied country or with any international organization whereby the United States agrees to provide communications support and related supplies and services to such country or international organization in return for the reciprocal provision to the United States of an equivalent value of communications support and related supplies and services such country or international organization.

"(b) Any agreement entered into under the authority of this section shall require that any accrued credits and liabilities resulting from an unequal exchange of communications support and related supplies and services during the term of such agreement shall be liquidated by direct payment to the party having provided the greater amount of communications support and related supplies and services. Payments received by the United States shall be credited to the appropriation or fund from which such communications support and related supplies and services have been provided.".

(b) The table of sections at the beginning of such chapter is amended by adding at the end thereof the following:

"2401. Reciprocal communications support.".

REPEAL OF PROHIBITION OF CONSOLIDATION OF FUNCTIONS OF MILITARY TRANSPORTATION COMMANDS

SEC. 906. Section 1110 of the Department of Defense Authorization Act, 1983, is repealed.

OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman Tower. The committee will come to order.

The committee meets this morning to receive testimony from the Secretary of Defense and the Chairman of the Joint Chiefs of Staff on the fiscal year 1985 defense budget.

We begin consideration of the proposed budget in the midst of an ongoing national dialog about the appropriate level of defense effort for next year.

This debate has been confused by a public perception that spending for domestic programs has been substantially reduced during President Reagan's administration while defense spending has been sacrosanct.

There is a view that the President has issued the Defense Department a blank check, and that the Congress has endorsed the check. Nothing could be farther from the truth.

The facts are these. In fiscal year 1982, the first of the Reagan administration, the Congress reduced the President's defense budget request from $226 billion to $219 billion.

The following year a $263 billion request was reduced by $18 billion, and last year a $281 billion request was reduced by $17 billion. The President's defense requests have been cut by $41 billion over the last 3 years.

At the same time, the Congress has mandated the creation of an Inspector General in the Department of Defense. It has legislated the creation of an Independent Office of Weapons Test and Evaluation.

It has made it illegal to spend appropriated funds for weapons systems that are sold without extensive warranties. And virtually every committee of the Congress with any colorable claim of jurisdiction over a portion of the Defense Department's operations has conducted extensive hearings related to national defense and the armed services.

The American people need not be concerned that the Defense Department has a blank check. They need not be concerned that Congress has ignored DOD's management. That is certainly not the case.

If anything, Congress has been overly involved in departmental management issues.

The American public is justifiably outraged when it reads in the press that unconscionable amounts have been charged for certain spare parts.

It is outraged when it learns that contractors have charged highly questionable overhead expenses to Government contracts.

And it is outraged when contracts that should be competed are let on a sole source basis.

But it is these management problems, which are the exception rather than the rule and which Secretary Weinberger has worked diligently to correct, that dominate public attention to defense.

It is, therefore, no surprise that Americans have the impression that defense dollars are not well spent. Sadly, this public attention to defense management issues somehow disregards the program instabilities created by defense budget cuts.

The continuing shifts in production rates substantially drive up the unit cost of weapons, but that story has not been well told.

Let me say quite clearly this morning that the outrage of the American people is appropriate. But it is at least partially misdirected.

The American people ought to be outraged that the Soviet Union has from 1960 to 1980 established numerical superiority over the United States with regard to virtually all weapon systems, and many of the Soviet systems are technically equal to or better than ours.

The American people ought to be outraged that throughout the 1970's the readiness of American forces had declined so rapidly that we were ill-prepared to respond to any significant conventional contingency.

The American people ought to be outraged that our Nation moved from a position of nuclear domination in 1960 to one of nuclear inferiority by 1980.

Let there be no misunderstanding. The Congress of the United States, even in the last 3 years, has not let defense spending be sacrosanct. But the constant assault on the Defense Department and the congressional insistence on large reductions each year from the President's program are not promoting our national security, but rather impeding it.

There will be Members of Congress who discard the budget Secretary Weinberger is about to present as soon as the presentation is made. They will do so either based on intuition or for political reasons.

But I do not believe that the American people have sent us here to decide on the resources needed to insure our national security based on intuition alone or for political expediency.

We have an obligation to assess the threat that we face in today's world and to determine, given that threat, what defense resources are required to meet our national commitments.

I hope that every member of this committee will take the time that is needed over the next several months to do that.

Finally, I want to take a moment to recognize the leadership that President Reagan and Secretary Weinberger have offered to the country in rebuilding our national defenses.

I genuinely believe that when the history of this period is written, it will be carefully noted that you, Mr. Secretary, and the President guided the United States back from a long period of neglecting our national defenses to a time when our national security was once again assured.

Before hearing from our witnesses, I would like to yield to the distinguished ranking member of the committee, Senator Nunn.

Senator NUNN. Thank you very much, Mr. Chairman.

I join you in welcoming both Secretary Weinberger and General Vessey here before the committee this morning.

Our committee has always tried to approach this authorization process on the most important bill affecting our national security in a bipartisan fashion to make certain that we provide for the security of this Nation.

I trust the approach this year will be no exception to that tradition.

I think we all must recognize, however, that there will be some difficulties and differences in coming to final conclusions on the defense budget this year.

It is a certainty based on last year's budget resolution and based on my perception, there has been no change in sentiment in this Congress that the level of defense spending that is being proposed today will be reduced.

The question is not whether it will be reduced. The question is when and how much it will be reduced and how we go about making those reductions in a way that maximizes the defense capability we are buying with every dollar that is expended.

I think that is going to be a very, very tough challenge.

There are several questions I think we in this committee need to focus on, certainly not just this morning but in the coming weeks, and months ahead as we deliberate the details of the defense budget.

The first is: Do we have a credible military strategy that is based on realistically available resources, resources that will be realistically available in the next 4, 5, or 6 years?

I think that is the critical question.

The starting point for determining the appropriate level of defense spending should be a clear understanding of what overall military strategy that spending supports.

The next point should be, are we closing the traditional gap between strategy and capabilities and between capabilities and resources? Are we closing that gap or is that gap getting wider based on additional commitments around the world?

If we are not closing that gap, and I, myself, believe that in spite of the increases in defense spending and capabilities that we have had in the last several years, that that gap is not closing, primarily because we have extended ourselves much further in the world, and though capabilities have increased, commitments have increased at a more rapid pace, I think we have to start asking serious questions about our military strategy and about how those resources are allocated and where we are going in the future.

The next major question I would pose for this committee is: What has the Department of Defense done with the large increases in funding that have been received since 1980?

From fiscal year 1980 through fiscal year 1984 the Department of Defense budget has been increased by $116 billion for a real growth in budget authority of approximately 40 percent.

I think, based on that, it is time to ask some very tough questions.

One of the toughest questions we will have to ask ourselves, Mr. Chairman, and I think you have already posed this one very well, is what will be the result of cuts that we make if we make them?

That is not just a question for this committee. The amount of defense spending, as we all know, will be primarily determined not by this committee but on the floor of the Senate in the first concurrent budget resolution and then we will have to make adjustments based on that concurrent resolution.

I think most members of this committee will be fighting for a higher number on the floor. Then it will become our duty to deal with that number that comes from the budget resolution.

What kind of increases in military capabilities have we received for our increased investment? What improvements in military capability exist today that if we had to go to war this morning, what have we really done to improve our capability to fight?

Has our force structure been expanded? Has the readiness and sustainability of our forces improved in a manner proportionate to the funding increases? Have we begun to realize greater efficiency and economies of scale in our investment programs?

Those are all major questions.

The third major question I would pose for our attention this year is, within limited resources, what are the most important priorities for which those resources should be allocated? For example, do we have now the proper balance between strategic nuclear weapons and conventional programs?

Do we have the proper balance between procurement of new equipment and readiness of existing equipment? How are we to insure that the strategic modernization does not come at the expense of improving conventional deterrence and capability as the budget is reduced?

Are we giving enough priority to improving conventional capabilities, to readiness, to sustainability, or are most of our increases going into hardware which will increase the demand for readiness money in the years ahead in the very same timeframe that the increased procurement accounts become due bills rather than authorizations?

Finally, Mr. Chairman—I know you will not agree on this one—we must ask the question, are any significant improvements in defense capability and strategy and formulation of that strategy and prioritization of resources possible without some reorganization of the Department of Defense, itself?

The work that this committee has done on the majority and minority side has so far in my Senate experience convinced me we will not be getting the most effective fighting force possible until we begin to make some fundamental changes in the structure of the Defense Department itself.

As we carry out our review of this authorization request, I know that we will continue to search for answers to those questions and I pledge my support, Mr. Chairman, to you and other members of this committee to try to provide the answers in the coming months.

I want to conclude by saying that when this committee has to make reductions in the 1985 defense budget, as I am anticipating we will be required to do by the budget resolution on the floor, we must do so with the cooperation and the sound advice of the Department of Defense.

It is potentially damaging to our long-term security to reduce and set priorities for the defense budget on a declining scale without input from those who are most familiar with the program in the Department of Defense.

I would ask the Secretary to take a close look at the strategy employed last year whereby we basically were making cuts in authorization and appropriation without the Defense Department acknowledging that those cuts were even going to be made.

At some point, Mr. Secretary—I can't advise you this morning—but after you fight your best for the highest dollar, as I am sure you sincerely believe in, at some point you will have to say, "The Congress is going to move downward on this scale and it is up to us to work with the Congress of the United States and to make sure that the money that is expended is expended in the most sensible way."

Again, I don't suggest the timing of that, but I think after the fight has been made on the first budget resolution, whatever the outcome of that, that is the period of time you need to do some real soul searching about the role of the Defense Department from that point on.

Last year, in my view, it was not the best way to handle the defense bill.

Mr. Chairman, I look forward to working with you and I pledge my support to your endeavors to pose these questions and to provide answers to these questions as well as other questions in the weeks to come.

Chairman TOWER. Thank you, Senator Nunn.

Mr. Secretary, you and General Vessey may proceed anyway you see fit. If you want to submit any supporting material for the record, we will be glad to include anything in the record that you want to be incorporated in the record. We will just leave it up to you to proceed as you see fit.

We will hear both from you and General Vessey before we turn to questions.

STATEMENT OF HON. CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

Secretary WEINBERGER. Thank you very much, Mr. Chairman, and Senator Nunn.

We do have a prepared statement and I appreciate very much your offer to have it placed in the record and I request that be done.

We have also submitted the annual report to the committee and to the Congress.

[For the report of Secretary of Defense Caspar W. Weinberger to the Congress on the fiscal year 1985 budget, fiscal year 1986 authorization request and fiscal years 1985–89 defense programs, as of January 31, 1984, see p. 137.]

We will have shortly a short version of that report which we will call "Your Defense Budget." That latter document should be up in a very few days.

We appreciate very much, Mr. Chairman, your very fine opening statement and your clear perception as you have always expressed it of the need of the Nation and of some of the important aspects that we rarely hear about the size and speed of the Soviet rearmament and the comparative lack of attention that many pay to that.

Senator NUNN. I appreciate very much your statement. I would like to respond to a couple of your questions before I make the formal opening presentation.

I want you to know that we do have a credible military strategy and that it is based entirely upon the necessities of the world in which we live. We do not have the option to eliminate at a stroke of the pen some of capabilities that we have to have because we cannot eliminate some of the conditions which give rise to the requirement for those capabilities in the first place.

I, too, would like to close the gap between the resources and the commitment, but no one has given me any advice yet on how we can reduce the commitments that have to be made if we are to maintain our national interest and our national security in a world that we did not make and we do not particularly like.

We do have a strategy for dealing with it and frequently it requires adding to our resources rather than reducing our commitments, although it would be nice to reduce our commitments if we could do so without damage to the Nation.

I will present, and I think it is a very proper question, the response to the inquiry as to what we have done with the increased resources that have been voted, although we do have a dispute with you about the amount of that increase.

We have been delighted to have the degree of support that we have had because we recognize that these are not very popular subjects.

Everybody wants a strong defense, nobody wants a strong defense budget.

It is vital to do as much as we can with what has been voted. Substantial amounts have been voted and we have done a susbtantial amount with them. I will go through that.

The result of the cut generally is to make everything that we need and everything that everybody knows and acknowledges that we need delayed in being available sharply increases costs. That was the result last year and that I hope will not be the result this year.

You mentioned last year's budget process. You mentioned the budget resolution. The thing that bothers most of us is when the budget resolution finally did emerge, not from this committee, the Congress as a whole paid very little attention to it and allocated to the Department far less than the budget resolution itself called for.

So, that would be part of the process we would want to look at again this year.

On the priorities, on the allocation between conventional and strategic, yes, again I will present data very shortly that I hope will respond to your question on that which, of course, is a completely proper question.

DOD Reorganization

On the organization of the Department, we have made many changes in the organization of the Department, and we are always extremely receptive to any suggestions that can improve our internal organization and management.

You asked our response if reductions should be demanded by those, who will be unwilling to face the realities in the world and commitments we have to make and keep?

We will certainly try to work with you. We have, however, made very substantial reductions in the amounts that the services and the people who have to do the actual fighting for us have indicated are clearly the minimum necessary. We have reduced those demands by in excess of $16 billion before we presented the budget to you.

Many advised me that tactically I should have submitted the whole amount and let cuts be made from that figure. However, I wanted to present to you a budget that I think could be fully justified and as a result, you have the budget that is before you.

I do appreciate the questions and the searching inquiry you have always devoted to these matters and the very informed approach that you have always taken. It is, therefore, a privilege again to be before the committee.

Mr. Chairman, with your indulgence, I would like to have a short opening presentation and General Vessey, I think, has a statement that he would like to make and then we will be delighted to try to take your questions.

Chairman Tower. Thank you, Mr. Secretary.

Secretary Weinberger. Senator Nunn has indicated the point I would like to make first and that is really the way in which we went about making up this budget that is before you.

There are some I know who are not familiar with the process, who feel that the defense budget figure is pulled out of the air and then doubled and then a lot of pieces of paper put in to support it.

That is not the process. The process really begins with the objectives of the country, the national security objectives which you see before you here.

[CHART 1]

NATIONAL SECURITY OBJECTIVES

Deter attack against U.S. and its allies and counter use of force to coerce or intimidate U.S. friends and allies.

If attacked, deny enemy its objectives and bring conflict to conclusion favorable to U.S. interests.

To promote mutual reductions in conventional and nuclear forces through negotiations and to discourage further proliferation of nuclear weapons.

To inhibit further Soviet expansion and to induce withdrawal by the Soviet Union from those countries it occupies by force.

To join with our allies in preventing the flow of militarily significant technologies and materials to the Soviet Union.

Of course, they have to, first of all, deter attack against us and our allies and to be able to counter any use of force that is sent there to try to intimidate or coerce us.

If we are attacked, then we have to have the capability to deny the enemy its objective and to bring the conflict to a conclusion in a way that is favorable to our interests.

We have to promote, especially as we have tried to do in the beginning, mutual and verifiable reductions in all kinds of weapons through negotiations and do our best to discourage any proliferation of nuclear weapons.

We have to be able to inhibit Soviet expansion and to induce the withdrawal from those countries that are occupied by force and we have to join with our allies in preventing the flow of militarily significant technologies and materials to the Soviet Union.

So, those are our basic objectives. We have not encountered anyone yet who quarrels with them.

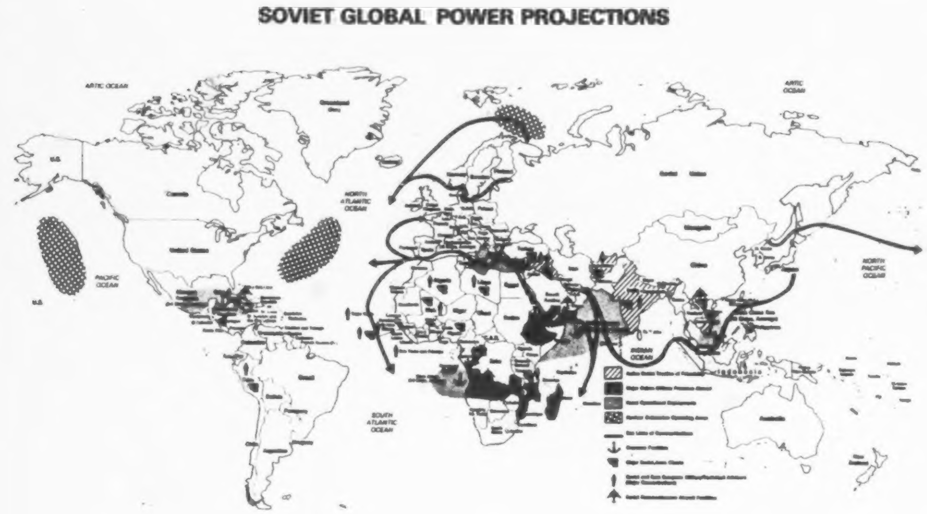
The threat to those objectives is set out before you here and that, of course, is the point that Senator Tower has very authoritatively and very expertly referred to and that is the expansion of Soviet military power in both quantitative and qualitative measures.

A great deal of that we know, to our disappointment, has come about because we let too much of our technology go.

A great deal has come about because their system is such they can put any amount of resources since only a few people in the Kremlin determine what is needed and by that means they have expanded their military capabilities enormously for 22 years.

This has resulted in a number of Third World and other instabilities. We have seen the results in Lebanon, Angola, Afghanistan, Ethiopia, Kampuchea, and Nicaragua. Such places around the globe create these very commitments that I have been talking to Senator Nunn about, that we cannot ignore or back away from or feel we can treat by saying we don't like that many commitments and it is beyond our resources.

The Soviet threat has also manifested itself in a number of ways. The most telling, I think, and the most persuasive is their ability to project the enormous amount of power which they have developed.



SOVIET GLOBAL POWER PROJECTIONS

[CHART 2]

You see here the areas of the world starting, of course, with the Soviet Union, itself, and the ways in which they can project that power, the number of client states, the Cubans, for example, that they have scattered around the world in various deployments, their naval deployments, their overseas facilities and their major arms clients and also their air bases that they can use around the world.

You will see that these are in a number of strategically located spots and the black lines and arrows indicate the routes that they use either to reinforce or to utilize, for whatever purposes they have in mind, these various areas in which they can project their power and project it very quickly.

By no strange coincidence these lines of communication and these sea lines of communication that they use are also in many cases, those that we have to use to bring vitally needed resources to our country from thousands of miles away or to support and reinforce our allies.

So, the need for the kind of naval additions to that we have asked for I think becomes self-evident when we look at the state of the world that has been created by the very aggressive military policy of the Soviet Union.

We have additional evidences of the nature of this threat and these are some of the comparisons between NATO's capabilities and production and the Soviet capabilities and production.

There has been some talk recently that the Soviet Union may be spending a little less than some people previously thought. That is an interesting historical study, but the important part is what are they getting for whatever they are spending?

[CHART 3]

NATO WARSAW PACT COMPARISONS

Over the decade 1974–1983, the Soviet's military spending exceeded ours by about 40 percent.

DIA estimates that Soviet military spending will consume about 17–19 percent of their GNP by the late 1980's as compared to about 7.5 percent in the U.S.

The Pact has been investing more heavily in military hardware than the free world since 1972. Cumulatively from 1972 to 1981, they outspent us by about 20 percent.

The Pact production continues to outpace NATO's by alarming ratios in most categories:

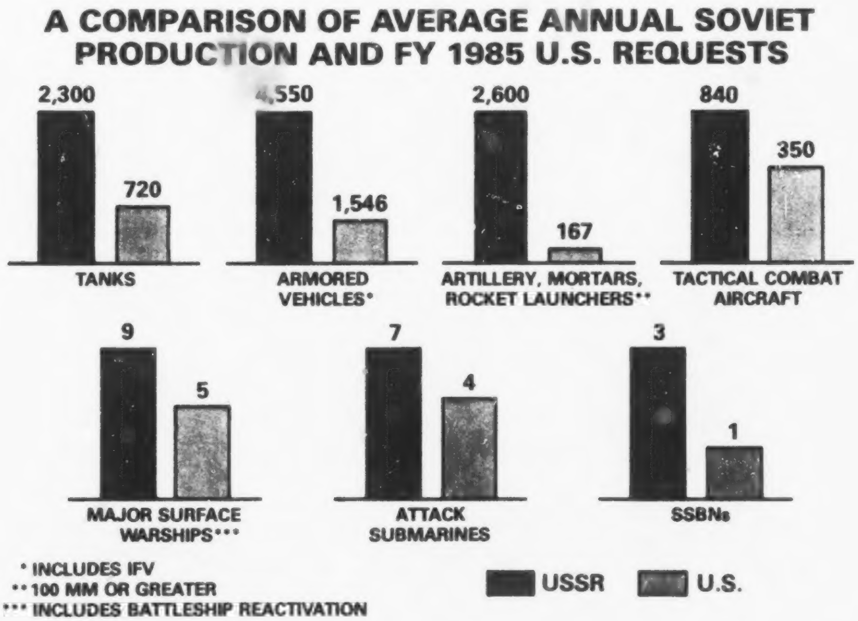
Tanks	1. 8/1
Other armored vehicles	1. 9/1
Artillery, mortar and rocket launchers	7. 3/1
Military helicopters	1. 7/1
Surface-to-air missiles	2. 8/1
Strategic nuclear missiles	4. 9/1
Cruise missiles	0. 6/1

This is what they are getting. As you see, they are outproducing the NATO nations including the United States in a ratio shown on this chart.

These represent average annual production by the Soviet Union against ours. With tanks it is 1.8 to 1, and artillery mortar and rocket launchers, 7.3 to 1; strategic nuclear missiles, almost 5 to 1. Only in cruise missiles do we have a small advantage at the moment.

These naturally result from the fact that during this whole period they outspent us by 20 percent and are continuing to do so.

The critically important thing is not how much more they spend or whether it is this percentage or that percentage; it is what they are getting and if they are getting very much more than we are.



[CHART 4]

Here is another way of explaining that for you graphically and that is the numbers of tanks, for example. The average annual Soviet production for the last 12 years has been 2,300. Our request is shown in blue for this year.

So, their average annual is 2,300. This year we are asking for 720 tanks.

As with the other items there, major surface warships: Their average annual production has been nine against five for us; tactical combat aircraft, average annual Soviet production, 840. If we get everything we ask this year, we will have 350.

When you add to that the long period of time during which we neglected seriously the Armed Forces, you will see why it is so difficult and so expensive to try to make it up.

This again shows the differences between the two countries, the two super powers, with respect, to research, development and deployment of strategic systems.

During the period of 1960 to 1970 we deployed Titan, Minuteman I and II, and the Polaris systems, and developed Minuteman III and Poseidon, whereas the Soviets were working on second and third generation ballistic missiles during that period.

During the decade of the seventies, when we developed only one new missile for the submarine, they brought on line Backfire, the SS–18's, SS–19's, SS–16's and SS–17's, and the new submarine missiles and three new categories of submarines. In the eighties, they are continuing with very large type of additional submarine missiles. We have just now started work on our strategic programs.

Those are the reasons why they do have this lead to which the chairman referred. All of those times they were working on new systems—as they still are—working on many later type missiles and working up to the point of getting ready to deploy them.

[CHART 5]

STRATEGY TO MEET THE THREAT

Strengthening deterrence while working for arms reduction

Conventional deterrence:
  Collective defense.
  Forward-based forces.
  Security assistance.
Nuclear deterrence:
  Multiplicity of retaliatory strategic forces—a triad of land-based ICBMs, small missiles, manned bombers, and submarine-launched ballistic missiles.
  Responsive and survivable command, control, and communication system.
  Strategic defense option for the future.

Senator Nunn asked about the strategy to meet the threat. It is here. We have to strengthen, we think, our deterrence capability, both conventional and nuclear, but at the same time we have to work as earnestly as we can, and it is admittedly difficult, for arms reduction.

It is difficult because at the moment there isn't anybody on the other side of the table. We are continuing to develop the means of trying to secure sharp and fully verifiable and equal reductions to levels that will aid our whole deterrence, both strategically as well as conventionally.

Conventionally we are trying now, and are working to improve our collective defenses with all of our allies, to move our forces to the most favorable forward-based positions and with security assistance to help our allies help themselves.

We have begun now and the Congress has authorized that we modernize all three parts of the triad at once. We are doing that with the MX misiles as well as the B–1 bomber and the later bomber and the submarine-launched missiles.

For the first time, when they come on line, they will have the capability of destroying hardened Soviet targets.

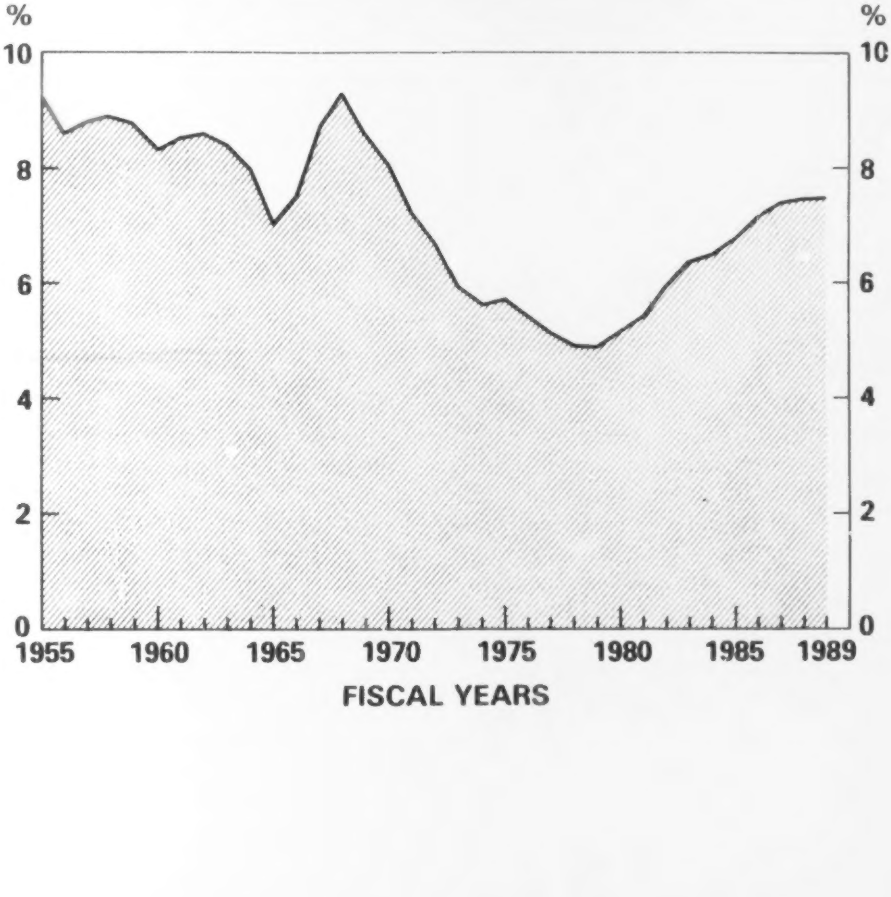
We are also, even more importantly—although little has been written about it—developing substantial improvements in our whole command and control and communications systems to make certain that they are both responsive and survivable.

At the same time we have begun work on the President's initiative for a strategic defense that will be thoroughly effective if it can be brought on line. It will be another way to try to deal with the threats that we face.

All of this has brought us to the development, then, of a budget to try to do that. The authority requested is $305 billion with predicted outlays of $264 billion.

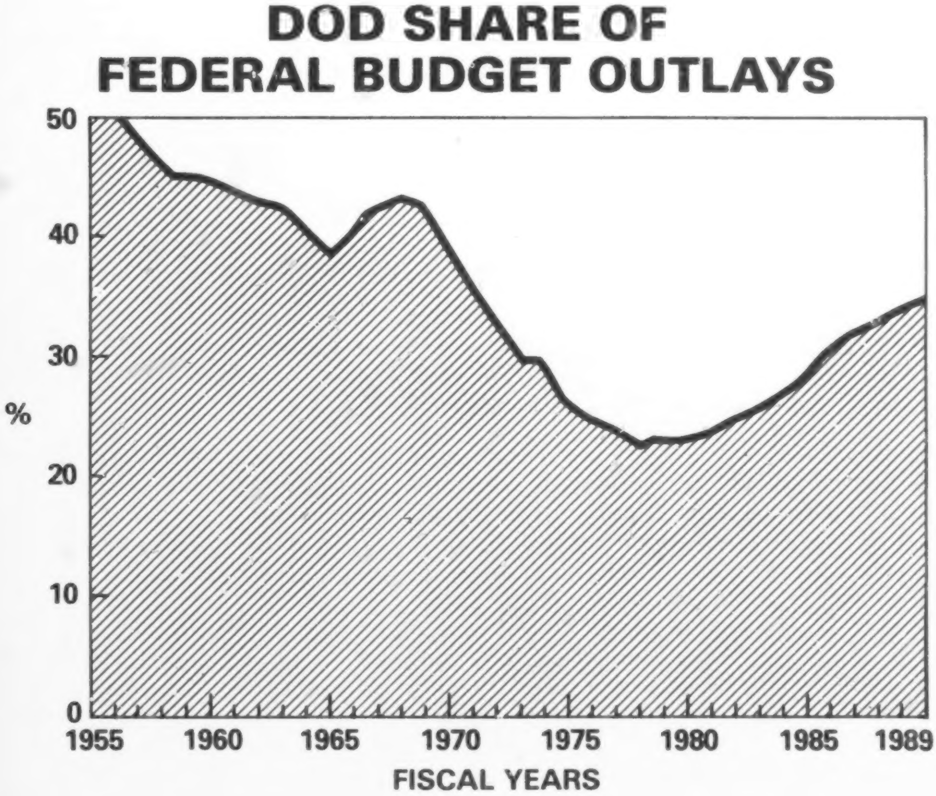
These are very large numbers and it is a very expensive undertaking, but these next few charts I think will demonstrate why that has to be.

DEFENSE OUTLAYS AS A SHARE OF GNP



As a share of our gross national product we have gone in a long steady decline starting in the sixties all the way down to 1980 so that the share of the GNP, which was around roughly 9 percent at that time, fell to well under 6 percent in 1980 and will never rise, even with the full enactment of the President's plan, to more than about 7.0 to 7.6 percent, in that range. It is only 6.8 percent this year.

But that is necessary to recover from this long and steady decline which took place at the same time the Soviets were adding enormously to their military spending at the rate of 16, 18, and 19 percent of their GNP.



[CHART 7]

Another way of showing this is on the share of the budget which in the fifties was well in excess of 50 percent and then, except for an increase during the Southeast Asia war, it came all the way down again in a long steady slope all through the seventies to bring us down to a point that was about 21 percent of the budget.

Then it would rise again. Now it is 28.6 percent in the 1985 budget. It will never be more than a third of the whole Federal budget, somewhere in the neighborhood of 31 or 32 percent, in the outyears.

COMPARISON OF PUBLIC SPENDING TRENDS

OUTLAYS

(PERCENT CHANGE)

FISCAL YEAR	NATIONAL DEFENSE	ALL OTHER FEDERAL	STATE & LOCAL
1970-1980	−19%	+ 88%	+30%
1981-1983	+22%	+ 7%	+ 1%
1970-1983	+ 3%	+106%	+32%

[CHART 8]

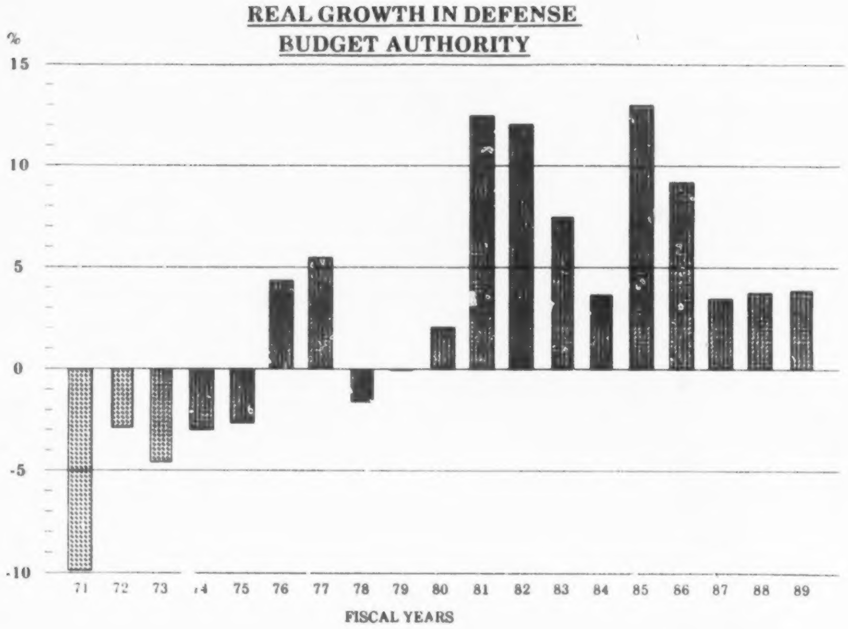
Now, we do have a very critically important point that the chairman made, and that is during this whole decade of 1970 to 1980 defense went down just about 20 percent measured in real terms.

All of the Federal spending during that period went up 88 percent. State and local spending at the same time went up 30 percent.

Restraint was introduced finally into the Federal system, but it wasn't restraint that brought about any minus figures at all comparable to the minus 20 percent of national defense in the previous decade.

In 1981, 1982, 1983 defense went up to 22 percent, about 7 percent a year, during those 3 years. For the whole 13-year period from 1970 until 1983, national defense increased only 3 percent, but all Federal spending went up 106 percent.

That, of course, is part of the problem, not only of the inflation which we finally seem to have cured, but of the neglect that we have unfortunately had in the defense system.



[CHART 9]

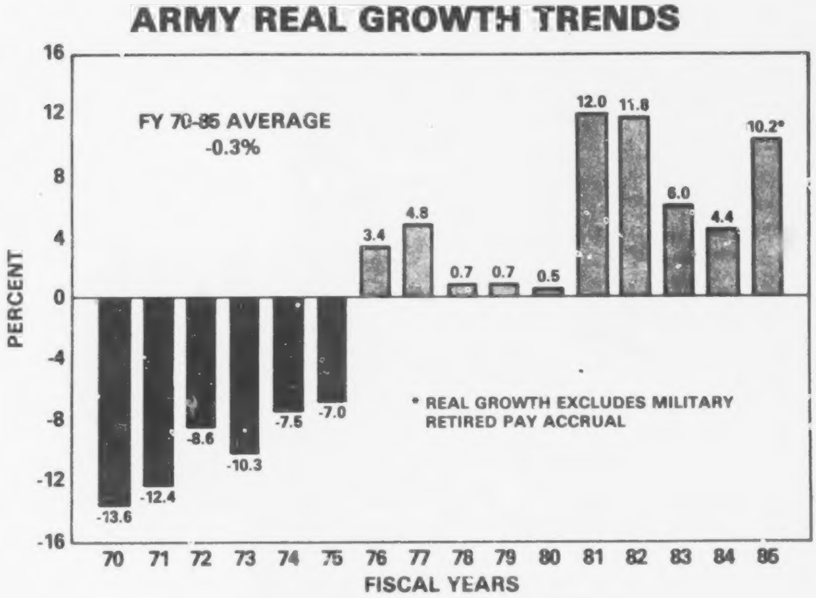
Another way of displaying what happened to us during that period is to look at the budget authority during that whole time.

Starting back in 1971, there were many years of negatives, a small attempt to recover in 1977 and 1978, then again declines until the 1981 budget when we came in and tried to restore that.

As you will see, there was a substantial reduction last year which has been referred to and that, of course, is one of the major factors why the 1985 budget has to be as high as it is to try to recover from that.

If 1986 and 1985 can be held, then we have the real promise of going down to around 3 to 3½ percent real growth in the remaining years of the decade.

That is part of the plan that will indicate very clearly the degree of strength that we will have regained.



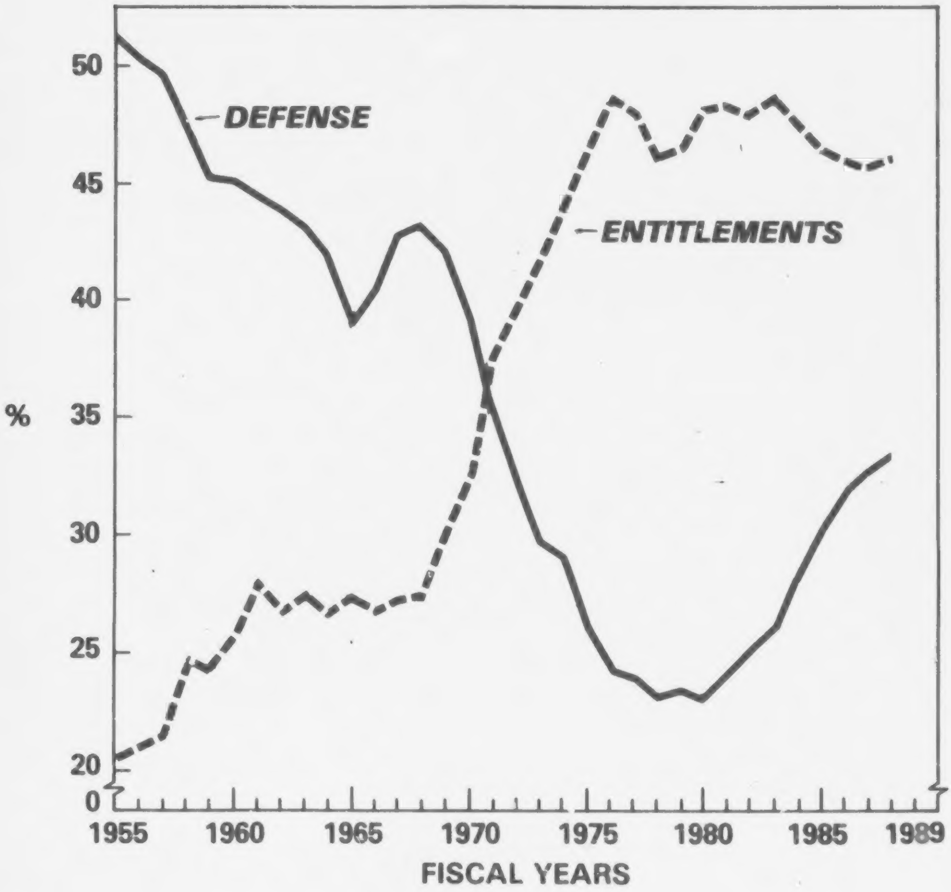
[CHART 10]

For one of the services it is a more dramatic picture. Back in 1970 there was a decline in the Army's real growth again. For 6 straight years the Army had a real negative decline in actual investment and growth as far as spending for that service was concerned.

There was a small attempt at recovery during the balance of 1977–78, but the next 3 years were absolutely flat. It was not until we came in that the increases required had begun to be applied.

The important thing is to look at that 15-year average. For the Army there was a minus three-tenths of 1 percent real growth during that whole period of 15 years. That is a very difficult thing to recover from, and it costs a great deal of money to do it. You might not have to do it in a world in which we are totally in command. But when you are in a world in which you are not in command, and where all of the activities on the other side, the Soviet Union, are in totally different directions, then we have to do the things that we have had to do since 1981.

SHARES OF THE BUDGET
(OUTLAYS)



[CHART 11]

This is the chart which compares the defense decline that we showed you on the previous chart with what has happened to the entitlement programs.

As you have seen, while defense had gone all the way down to about 23 or 24 percent of the budget before we started up again—and as I said, it will never get above 32 percent—the entitlement programs went straight up, and instead of coming down commensurately, they have held off and started up again.

When you see what has happened to our priorities, it is clear why that blue line representing defense had to start coming back up again.

We have managed to do that, but at the same time bringing down inflation very sharply. That, I think, has been a real achievement and we are well launched on what we have to do.

FY 1985
DEPARTMENT OF DEFENSE BUDGET
FINANCIAL SUMMARY
BUDGET AUTHORITY & OUTLAYS
(CURRENT $ BILLIONS)

	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
BUDGET AUTHORITY	**178.4**	**213.8**	**239.5**	**258.2**	**305.0**
% REAL GROWTH	12.5	12.1	7.5	3.7	13.0
OUTLAYS	**156.1**	**182.9**	**205.0**	**231.0**	**264.4**
% REAL GROWTH	4.7	7.8	7.1	8.8	9.3

[CHART 12]

Here again is a financial summary of both the authority and the real growth involved. Real growth was up 12½ percent in 1981 and 12 percent in 1982, down to 7½ percent increase in 1983 and then all the way down to 3.7 last year. That, of course, clearly requires that we keep on doing what we are doing and at the same time, in the most inexpensive and efficient way, bring it up to strength.

The outlays have run along the percentage of real growth rate shown on the chart now from 1981–1982 ranging in the 7-, 8-, and 9-percent range.

FY 1985
DEPARTMENT OF DEFENSE BUDGET
LONG RANGE FORECASTS

BA ($ BILLIONS)	1984	1985	1986	1987	1988	1989
MILITARY RETIRED PAY*	16.6	17.6	19.4	20.9	22.5	24.0
OTHER MILITARY FUNCTIONS	241.6	287.4	330.2	358.3	389.0	422.1
TOTAL, CURRENT PRICES	258.2	305.0	349.6	379.2	411.5	446.1
TOTAL, CONSTANT (1985) PRICES	269.9	305.0	333.0	344.7	357.9	371.7
PERCENT CHANGE	3.7%	13.0%	9.2%	3.5%	3.8%	3.9%
OUTLAYS ($ BILLIONS)						
MILITARY RETIRED PAY*	16.8	17.4	19.3	20.9	22.5	23.9
OTHER MILITARY FUNCTIONS	214.2	247.0	282.5	318.3	347.3	374.9
TOTAL, CURRENT PRICES	231.0	264.4	301.8	339.2	369.8	398.8
TOTAL, CONSTANT (1985) PRICES	241.8	264.4	286.7	306.8	319.5	330.1
PERCENT CHANGE	8.6%	9.3%	8.4%	7.0%	4.1%	3.3%
COMPOSITE PAY/PRICE ASSUMPTIONS FOR OUTLAYS (FY1985 = 100%)	95.5	100.0	105.3	110.6	115.8	120.9

* RETIRED PAY IS ON A CASH BASIS IN FY 1984 AND ON AN ACCRUAL BASIS THEREAFTER.

[CHART 13]

Here is the long-range forecast for the out years. As you will see, if we can get the required amounts for the validated needs that will be served this year, then we can dip down again to about an 8 percent increase in outlays in 1986. The budget authority requirements for the remaining portion of the decade can run along at growth levels of 3½ to around 4 percent.

That is what we have been striving toward. I think that is what is essential.

The inflation shown on the last line is the special Defense Department deflator.

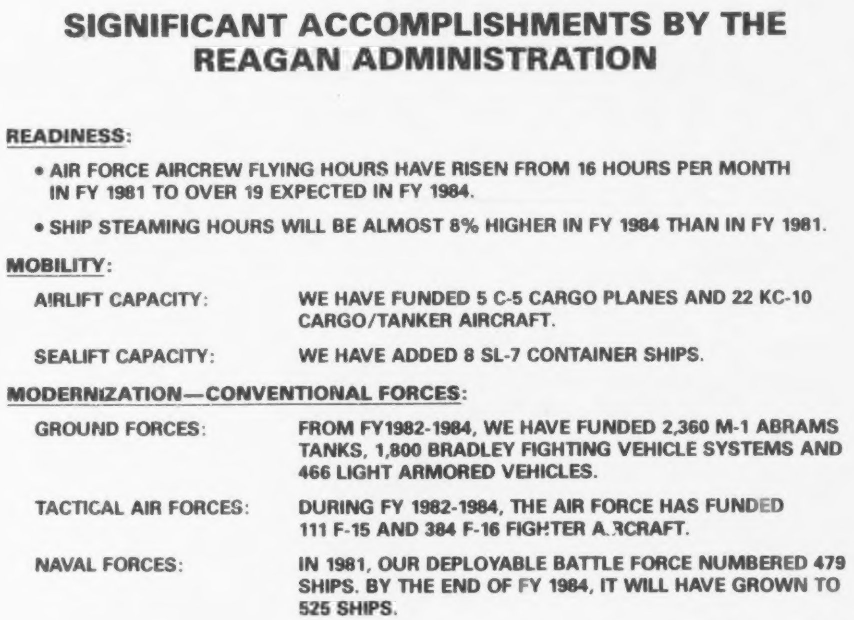
Senator GOLDWATER. Will you hold that up again?

What is the total percentage of pay to the total outlay, the percentage of pay and upkeep of the troops against the total outlay?

Secretary WEINBERGER. This year, Senator, it is 43½ percent. That is all the personnel cost of the Department.

Senator GOLDWATER. Thank you.

Secretary WEINBERGER. Senator Nunn had a very good question. What have we bought with all of this and what have we accomplished?



SIGNIFICANT ACCOMPLISHMENTS BY THE REAGAN ADMINISTRATION

READINESS:

- AIR FORCE AIRCREW FLYING HOURS HAVE RISEN FROM 16 HOURS PER MONTH IN FY 1981 TO OVER 19 EXPECTED IN FY 1984.
- SHIP STEAMING HOURS WILL BE ALMOST 8% HIGHER IN FY 1984 THAN IN FY 1981.

MOBILITY:

AIRLIFT CAPACITY:	WE HAVE FUNDED 5 C-5 CARGO PLANES AND 22 KC-10 CARGO/TANKER AIRCRAFT.
SEALIFT CAPACITY:	WE HAVE ADDED 8 SL-7 CONTAINER SHIPS.

MODERNIZATION—CONVENTIONAL FORCES:

GROUND FORCES:	FROM FY1982-1984, WE HAVE FUNDED 2,360 M-1 ABRAMS TANKS, 1,800 BRADLEY FIGHTING VEHICLE SYSTEMS AND 466 LIGHT ARMORED VEHICLES.
TACTICAL AIR FORCES:	DURING FY 1982-1984, THE AIR FORCE HAS FUNDED 111 F-15 AND 384 F-16 FIGHTER AIRCRAFT.
NAVAL FORCES:	IN 1981, OUR DEPLOYABLE BATTLE FORCE NUMBERED 479 SHIPS. BY THE END OF FY 1984, IT WILL HAVE GROWN TO 525 SHIPS.

[CHART 14]

Here are the accomplishments. These are the major ones and I think they have increased our strength in an extremely important and vital way over the last 3 years.

We have improved readiness and I would like to highlight one or two of these things. Air crew flying hours are up now and ships' steaming hours are up.

We have increased our mobility, funded five of the C–5 cargo planes, 20 of the tanker planes and added 8 of the container ships that are high speed and very easy to load and unload.

[CHART 15]

SIGNIFICANT ACCOMPLISHMENTS—(CONTINUED)

Modernization—strategic forces:

We have deployed 3 Trident-class submarines and funded 8 more through fiscal year 1984.

We have proceeded with development of the Trident II missile as we completed procurement of Trident I missiles.

Preliminary work on small ICBM has been funded consistent with Scowcroft Commission recommendations.

We have begun deployment of the B–52 bomber fleet for Cruise missile capability.

Significant progress accomplished in up-grading strategic communication and control systems.

We have increased the modernization of the conventional forces by funding 2,360 M–1 Abrams tanks, 1,800 Bradley fighting vehicle systems, 466 light armored vehicles, 111 F–15's, 384 F–16's. These have been added to the force.

With the Navy the deployable battle force when we came in numbered 479. At the end of fiscal year 1984 it will be 525 and we have requested another 23 ships in this year's budget. That will continue our progress toward the 600-ship Navy which we think is essential to maintain the freedom of the seas and protect our own sea lanes of communication which are a vital part of our entire national security.

There are additional accomplishments in the modernization area. I mentioned the modernization of the triad. We have now deployed three of the new Trident submarines. We have funded eight more through this fiscal year.

We have completed procurement of the Trident I missiles and we have proceeded with the development of the Trident II (D-5) missile that will ultimately be replaced by the D-5.

We have done a lot of preliminary work as the Congress, the Scowcroft Commission, and the President have directed the small single warhead ICBM. We have funded procurement of 10 B-1 bombers through fiscal year 1984 and have asked for 34 in 1985, which is the normal planned procurement of that program.

We will soon begin deploying our third squadron of B-52 bombers with the cruise missile capability. We have also made significant progress in upgrading in every way our strategic command, control and communication control system as well as increasing their survivability.

MANAGEMENT IMPROVEMENTS

- CREATION OF INSPECTOR GENERAL (IG)
  - AUDITS
  - INVESTIGATIONS
- TEN-POINT SPARE PARTS PROGRAM
  - AUDITS
  - ADMINISTRATIVE, LEGAL,CONTRACTUAL EFFORTS
- ACQUISITION IMPROVEMENT PROGRAM (AIP)
  - PROGRAM STABILITY
  - MULTI-YEAR PROCUREMENT
  - ECONOMIC PRODUCTION RATES
  - REALISTIC BUDGETING
  - IMPROVED READINESS AND SUPPORT
  - INCREASED COMPETITION
- ENHANCED DECISION-MAKING PROCESS
  - SERVICE SECRETARIES
  - JCS
- REFORM '88 AND THE GRACE COMMISSION

[CHART 16]

Then we have also made a substantial number of management improvements. Creation of the Inspector General was mentioned by the chairman, and our IG has conducted very vigorous audits and investigations.

I want to say a special word about spare parts because I know what a critically important issue that is in the minds of the public and understandably so.

We had a little dilemma, not much at the beginning. Sometime in the middle of last year our audits began disclosing the terrible prices that had been paid and were still required to be paid under some of the contracts we had for spare parts, we knew we had a problem.

Spare parts are, of course, absolutely essential because you can't keep operating without them in any of these things that we buy.

The dilemma was whether we should publicize that and move immediately to do something about it or try to keep it as quiet as possible and do what we could.

I decided that we had to publicize it. It was a very bad story which we all knew would create for us a great deal of misunderstanding because, as the bearer of bad tidings, it would be concluded that we did it ourselves.

What we have done since then is, of course, to adopt the basic programs and policies that I think will correct it. We will probably find some more, rising from the past. We have the largest audit in our history, over 300 auditors working on all the contracts to identify and isolate these situations.

We have had good results in getting refunds from manufacturers who did not legally have to give them. They had no legal obligation because our contracts permitted this action. Some had almost a monopoly on supplying spare parts, some contracts gave them proprietary rights to everything in the weapon system on which they had won the bid. The contracts, because final pricing was delayed, had the practical effect of allowing them to set their own prices.

All of that is changed for the future. We will, as I say, find some more legacies from the past. But it was a vital thing to do.

While we have heard all the stories and all the demagogurey of people buying hammers in hardware stores and paying $3.50 for them and the Defense Department paying $900, the simple fact of the matter is that conditions that gave rise to that were discovered by us.

We were as outraged as anyone else and have taken the steps to stop it. It is an important thing to have done. There are many ways we could have done it, but I think the way we did it was the best way.

Now we have started on this track, I think it is important for the committee to know that it was a series of situations that were allowed to roll on over the years, but which could undermine the vitally needed public confidence in the Defense Department.

We have also had, I think, a much improved acquisition program, with the consent of the Congress. I am delighted to acknowledge the cooperation we have had on multiyear procurement which, along with the economic rate of acquisition is saving us and the people billions of dollars. We also have a much better decisionmaking process now in which the service secretaries, the Commanders in Chief, take an active role in helping us determine that the priorities and the budget needs are fully consistent with the needs that they see in the field in carrying out the very difficult assignments that we have given to them.

The Grace Commission has come in with a number of very important suggestions. We agree with about 70 percent of them. We are doing a great many of them already, and we appreciate very much seeing the confirmation of our assessments and our changes in these procedures.

About 80 percent of them require legislation. Many of them require legislation that has been previously rejected.

We have some quarrel with some of the estimates of savings. But we have adopted a great many of them and in a sense they have adopted a great many of our reforms, and that kind of effort, I think, is extremely valuable and we are pursuing it as carefully as we can.

These are things that we have done with the spare parts. That is the 10-point program, the most important part of which is improving our contracts. Department-wide attention to the whole thing, buying by description of the part rather than by catalog number, making substantial incentives to employees to find cost savings, and taking disciplinary action up to the removal of those who allow abuses like these to continue.

Of course, these very large-scale audits have been underway since last fall, to find out the total and full extent of this and other matters we will get refunds or at least try to get them, although legally we are not entitled to them. At the same time we want to make sure we have done everything to correct that situation.

ACTIVITIES TO CURB WASTE, FRAUD AND ABUSE

AUDITS OF INTERNAL MANAGEMENT OF DEFENSE OPERATIONS AND PROGRAMS

18,467 REPORTS **POTENTIAL SAVINGS: $1.6 BILLION**

INVESTIGATIVE CASES

16,357 CASES CLOSED

8,023 CASES REFERRED FOR PROSECUTION OR ADMINISTRATIVE ACTION

657 CONVICTIONS

FINES, PENALTIES, RESTITUTIONS, AND RECOVERIES COLLECTED FROM REFERRALS TO:

JUSTICE DEPARTMENT:	**$5.2 MILLION**
MILITARY DEPARTMENTS:	**$9.6 MILLION**

DCAA AUDITS

57,782 REPORTS

$28.6 BILLION IN CONTRACT COSTS QUESTIONED — $9.1 BILLION SUSTAINED

[CHART 17]

Here is a quick summary of what we are doing on the waste, fraud and abuse front with the audits. Some 18,000 reports have come in on internal management with savings we estimate at $1.6 billion.

And the other statistics there include the new joint program we have with the Department of Justice, which covers fines, restitutions as well as convictions for any kind of fraud that is practiced against the Department.

As you will see at the bottom, our contract pricing audits now exceed $57,000 and have resulted in some $28 billion in contract costs being questioned and a little over $9 billion in contract costs being saved either by proper action at the beginning before the contract was entered into or by challenge to the way in which the contract was carried out.

That completes that part of the presentation, Mr. Chairman. I appreciate very much the opportunity to do this.

I just want to close by saying that what we have asked for is what we believe is essential to carry out and add the next vitally needed increment to a program to regain our strength after a decade of neglect. We need to do it, we have to do it, not because there is any pleasure in spending a large amount of money, but because it is vitally needed in response to the kind of conditions that we face.

We have sized our efforts not to secure superiority, but to secure an effective deterrent and at the same time to devote all the effort we can to try to secure that deterrent at much lower levels through a serious arms reduction that can be fully verified and can bring about a major reduction rather than just authorize the increases that the Soviets planned all along which, unfortunately, has been somewhat the pattern in the past.

With that and with the reductions that we have made, we present to you a budget that we can honestly say fulfills the responsibilities that I have, and I would not be able to be comfortable doing anything less.

As large as the amount is, I have these responsibilities and I think I essentially present to you the honest belief I have, the Department has and the service has, as to what is needed.

Thank you very much.

[The prepared statement of Secretary Weinberger follows:]

PREPARED STATEMENT OF THE SECRETARY OF DEFENSE, CASPAR W. WEINBERGER

Mr. Chairman, members of the committee. Thank you for providing me the opportunity to discuss the fiscal year 1985 defense program. This is the fourth defense budget that I have presented to this committee. And in many ways it is the most important, for it is this budget that will indicate to friend and foe alike that we intend to keep the U.S. defense program on the balanced and prudent course that was set three years ago.

The defense program that I speak about today is the result of detailed planning, programing and budgeting efforts within the Department of Defense. Please notice that budgeting is the last phase of our internal process of program evolution. Primary to the development of defense requirements is the determination of our national security objectives, the military threats to successful accomplishment of those objectives, the best strategy to counter those threats, and the forces required to implement that strategy. Once this process has been completed, the latest costs are applied to the resulting requirements. The budget before you requests $305 billion in budget authority for the Department of Defense. It is our belief that the program provided for in the fiscal year 1985 budget will create a modern and balanced force, armed with advanced weapon systems, maintained at the highest state of manpower and material readiness, and prepared for sustained combat operations in locations throughout the world.

As President Reagan said in his state of the Union address, "the United States is safer, stronger, and more secure in 1984." Our program to restore America's defenses is working. Firm leadership has kept us steady on our course to preserve peace where it exists and to restore it where we can. One of our toughest challenges today stems from the situation in Lebanon. Our effort there is dedicated to freeing that country of all foreign forces and helping to restore its sovereignty so as to build the foundation of a secure peace. We are resolved to stay the course. We cannot permit terrorism to succeed; we cannot let those who promote terrorism to triumph against the wishes of the vast majority of the people.

When the safety of American citizens in Grenada was threatened, our armed forces demonstrated that they were once again capable of responding quickly and decisively in a crisis. With less than forty-eight hours notice, our forces secured the safe departure of more than 800 American citizens and restored that island nation's hope for democracy and progress.

As the Soviets mounted a "peace offensive" in Europe, even while they refused to accept a negotiated solution to the threat posed by their SS-20 missile monopoly, we demonstrated the unity and staying power of the NATO alliance. Our allies, acting through their democratically-elected legislatures, stood firm in their decision to deploy Pershing II and ground-launch cruise missiles, and in their determination to continue to seek a negotiated alternative.

As this Congress debated the future of our land-based strategic forces, we demonstrated the durability of our bipartisan consensus to strengthen America's defenses. With the able help of the bipartisan commission on strategic forces, Congress and the President reached agreement on the future of our land-based strategic forces, and mapped out a strategy for achieving genuine, significant, verifiable arms reductions. We also have begun to advance the technology for an effective defense against ballistic missiles. Such a defense may offer us the opportunity to strengthen deterrence and to reduce the threat of missile atack.

And finally, thanks to the bipartisan support of Congress, and in particular the support of many of you on this committee, we have seen a complete turnaround in the quality of our armed forces. Some of you will remember that, as one of my first acts three years ago, I came to you and asked for additional funds to redress the compensation of our service men and women. Many of you, recognizing the urgent need to revitalize morale and readiness throughout the ranks of our armed forces, asked then whether we should return to the draft immediately, before the all-volunteer force collapsed completely. But you approved the funds we requested, and today—less than three years later—our armed forces have undergone a dramatic revitalization.

During the past year all services met or exceeded their recruiting objectives.

The quality of those recruits is far higher; from 68 percent high school graduates in 1980 to 91 percent this past year.

Retention rose in that same period from 55 percent to 68 percent, with the Air Force and Navy having their best year for reenlistments in 1983.

And the Guard and Reserves share in the improvements; the Selected Reserves rose above one million for the first time since 1961 with accession quality improvements comparable to the active forces.

However, as the economy continues to improve and domestic unemployment declines, we must ensure that military compensation remains competitive so that the recruiting and retention gains made over the past few years are not reversed.

The department's civilian workforce has made an essential contribution to military readiness. The civilian employees of the military services and defense agencies provide depot maintenance, research and development, and base operations support for our armed forces. The defense agencies, basically civilian organizations, eliminate the need for redundant overhead organizations in the services while supplying effective and economical support.

As we measure achievements of the past, we also must take stock of the challenges of the future. For we continue to face three sobering facts about the Soviet Union.

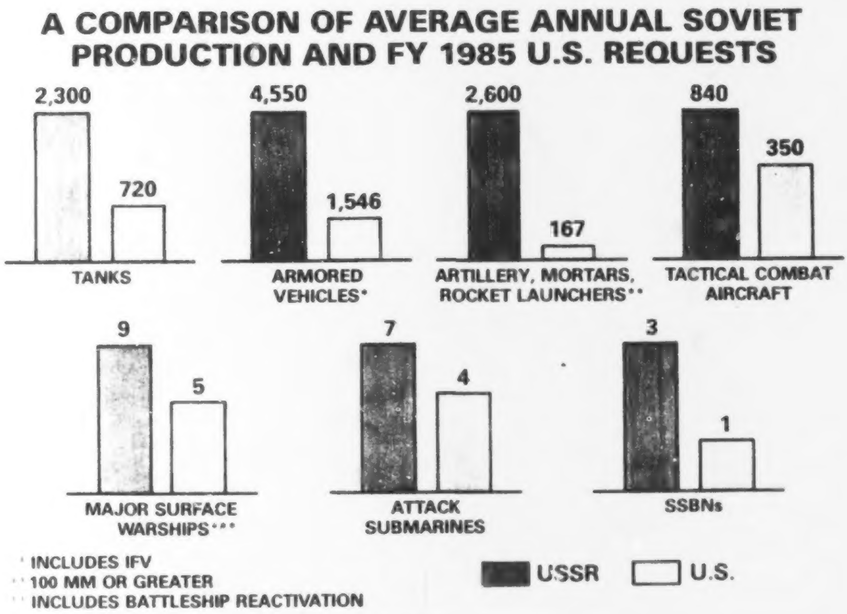


CHART 1.—U.S./U.S.S.R. comparison of conventional weapons production

The Soviet military buildup, both quantitative and qualitative, has produced a major shift in the nuclear and conventional balance.

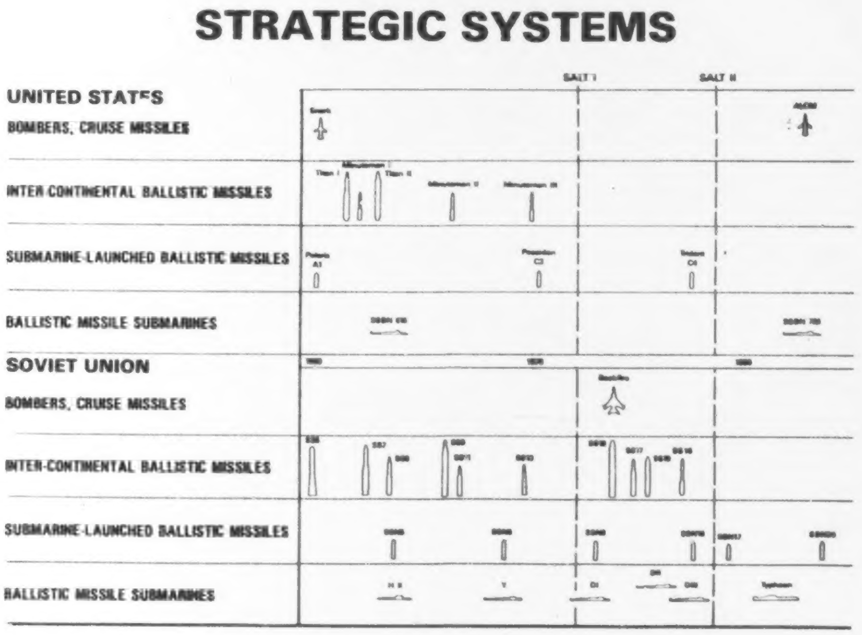

STRATEGIC SYSTEMS
SALT I
SALT II
UNITED STATES
BOMBERS, CRUISE MISSILES
INTER-CONTINENTAL BALLISTIC MISSILES
Titan I
Minuteman I
Titan II
SUBMARINE-LAUNCHED BALLISTIC MISSILES
A1
C3
C4
BALLISTIC MISSILE SUBMARINES
SOVIET UNION
BOMBERS, CRUISE MISSILES
INTER-CONTINENTAL BALLISTIC MISSILES
SUBMARINE-LAUNCHED BALLISTIC MISSILES
BALLISTIC MISSILE SUBMARINES

CHART 2.—U.S./U.S.S.R. comparison of strategic weapons

Soviet military posture has become increasingly offensive in orientation. Their weapon systems, tactics and training, chemical warfare operations, and organizational changes give them greater capability to carry out an offensive strategy.

SOVIET GLOBAL POWER PROJECTIONS

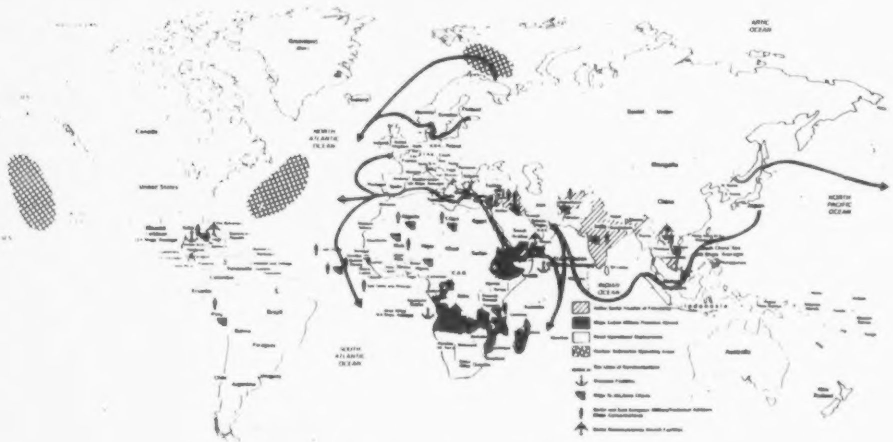


Chart 3.—Power projection map

The Soviets have expanded the global reach of their military forces, enhancing their ability to project influence and power, especially in the third world. Larger numbers of advisors, expanded foreign military sales, and increases in naval port visits, all point to greater Soviet military involvement throughout the world. Furthermore, Soviet violations of several arms control agreements—such as the biological weapons convention and the ABM treaty—demonstrate how difficult it is to ensure that the Soviet Union will comply with its commitments. Effective verification measures are essential, but—as we have now discovered—they are not sufficient to make arms control succeed.

The Soviets have not only accumulated enormous military power. They have also demonstrated their willingness to use that power to achieve their political ends.

For the United States, by contrast, military strength will never be an end in itself; nor will military strength alone give us the means to achieve our ends. The freedom and prosperity we seek for ourselves and all nations cannot be created or imposed by force—although they can be destroyed.

The cornerstone of our strategy, therefore, remains deterrence, that is, convincing any potential adversary that the cost of aggression would be too high to justify an attack. Our strategy is defensive in orientation but if deterrence should fail, we must be willing to fight to restore peace on favorable terms.

In implementing this strategy, we need a realistic view of the threats we face. But let us also recognize that we have great strengths that our adversaries cannot draw upon. Our alliances are more robust, since our allies join us willingly, while the Soviet Union guarantees loyalty by menacing its "friends." Our troops are more highly motivated, for our forces defend freedoms the Soviet Union and its Allies deny to their own citizens. Free enterprise and innovation have given our military forces a technological edge. And finally, with a flexible strategy we can effectively deter aggression in many areas without having to maintain significant levels of forces in all of them simultaneously.

But we cannot depend on the strength of our friends and allies if we are not willing to maintain our own defense effort, or our commitment to joint ventures and security assistance. And, to help many of our friends to help themselves, we have to provide assistance. In many parts of the world, security assistance programs are the most effective way of strengthening our own security.

We cannot rely on the superior quality of our men and women in uniform if we are not willing to give them the compensation they deserve, or the tools they need to do their jobs. We cannot assume that we will keep a technological edge unless we continue developing and modernizing our equipment and halt the hemorrhage of technology to the Soviet Union. We cannot retain the benefits of flexibility without training and equipping our forces to respond to different contingencies. Above all, we cannot escape the responsibility of retaining forces of sufficient size and quality to make our deterrent credible at all levels of conflict.

Unfortunately, during the 1970s the United States neglected those strengths at the very time that the Soviets were compensating for their own weaknesses. While the Soviets were continuing to widen the quantitative gap in weapons. They were also devoting an increasing portion of their military spending to research and development and procurement to achieve a qualitative improvement in their military hardware.

When this administration took office we had to confront some serious difficulties in our military posture. Any one of the problems we faced—low levels of readiness and sustainability, difficulty in recruiting and retaining qualified personnel, shortfalls and obsolescence of military hardware, and higher costs from inefficient management of defense resources—would have required immediate attention. But this administration had to address them all simultaneously, if we were to return America's defense programs to a safe and steady course. And with the bipartisan support of Congress we did just that. Let me review with you our progress, and tell you where this budget will take us.

SIGNIFICANT ACCOMPLISHMENTS BY THE REAGAN ADMINISTRATION

READINESS:

IMPROVEMENTS IN THE LEVEL AND QUALITY OF TRAINING CONTRIBUTED TO READINESS GAINS.

AIR FORCE AIRCREW FLYING HOURS HAVE RISEN FROM 16 HOURS PER MONTH IN FY 1981 TO OVER 19 EXPECTED IN FY 1984.

SHIP STEAMING HOURS WILL BE ALMOST 8% HIGHER IN FY 1984 THAN IN FY 1981.

MOBILITY:

AIRLIFT CAPACITY: WE HAVE FUNDEDS C-5 CARGO PLANES AND 20 KC-10 CARGO/TANKER AIRCRAFT.

SEALIFT CAPACITY: WE HAVE ADDED 8 SL-7 CONTAINER SHIPS AND 13 TAKX CARGO SHIPS.

MODERNIZATION - CONVENTIONAL FORCES:

GROUND FORCES: FROM FY 1982-1984,. WE HAVE FUNDED 2,360 M-1 ABRAMS TANKS, 1,800 BRADLEY FIGHTING VEHICLE SYSTEMS AND 466 LIGHT ARMORED VEHICLES.

TACTICAL AIR FORCES: DURING FY 1982-1984, THE AIR FORCE HAS FUNDED 111 F-15 AND 384 F-16 FIGHTER AIRCRAFT.

DURING FY 1981-1984, THE NAVY HAS FUNDED 78 F-14 AND 231 F/A-18 AIRCRAFT.

SEA FORCES: IN 1981, OUR DEPLOYABLE BATTLE FORCE NUMBERED 479 SHIPS. BY THE END OF FY 1984, IT WILL HAVE GROWN TO 525 SHIPS.

CHART 4.—Significant accomplishments

Readiness and sustainability. By the beginning of this decade, years of underfunding readiness and sustainability had left our forces unprepared to respond quickly in a crisis or to sustain operations for very long.

We acted immediately to rectify that dangerous situation. And, in the fiscal year 1985 budget we continue to provide additional funds for maintenance and increased training. For example, this budget will permit us to reduce depot maintenance backlogs by 28 percent over fiscal year 1984 levels. It will also permit us to continue increasing steaming days for our fleet and flying hours for our air crews, enabling our forces to stay fully qualified. At the same time, our capability to sustain our forces in the field will have increased by almost 50 percent when the munitions and spares and repair parts procured by the fiscal year 1985 budget are delivered.

Conventional modernization. This administration also had to confront a major shortfall in weapons and equipment. Much of what we did have, moreover, was aging and increasingly obsolete compared to the new Soviet hardware.

During the past three years we have embarked on a long-term program to modernize our forces for the future. During the past three years, we have embarked upon a long-term program to modernize our forces for the future. Through fiscal year 1984, we have funded 2,300 M-1 Abrams tanks, 1,800 Bradley fighting vehicles systems and 466 light armored vehicles for our ground forces. In addition, we have procured 111 F-15 and 384 F-16 fighter aircraft for the Air Force and 78 F-14 and 231 F/A-18 aircraft for the Navy to expand our tactical Air Forces. And, in 1981, our deployable battle force numbered 479 ships, but by the end of fiscal year 1984, it will have grown to 525 ships.

In the fiscal year 1985 budget we have provided for a 19.5 percent increase in investment funding to restore the momentum of our modernization program that was lost last year when the growth of our investment funding was cut drastically.

We are continuing to improve the firepower, mobility, and survivability of our land forces by procuring 710 Bradley fighting vehicles and 720 M-1 Abrams tanks. It is noteworthy that in NATO competition this past summer, the M-1 performed better than any U.S. tank in history.

For our air force, we are planning to buy 48 F-15s and 150 F-16s to enable us to expand our air force to strengthen our forward deployed units.

In fiscal year 1985, the Navy's deployable battle force will reach 545 ships as it continues to build toward its goal of 600 ships. I am pleased to report that now virtually all our ships are being delivered on schedule and within budget.

To support our marines, we continue our improvement of amphibious ships. The marines are also obtaining improved tactical mobility and firepower as we continue to purchase the CH-53E helicopter and 155mm howitzer.

Our guard and reserve forces are being modernized as well with such items as the M-1 Abrams tank, the F-16 aircraft and the *Perry*-class guided missile frigate.

Flexibility is key to the efficient use of our military forces. The initiatives we have undertaken with regard to inter-theatre airlift, ready reserve shipping, enroute support of airlift forces, and prepositioned equipment will allow us to deploy our strength in a timely fashion. This gives us the capability to avert a crisis from turning into a war, or to halt aggression before it overcomes our defenses.

Further, readiness, sustainability, modernization, and people programs drive the need for an adequate military construction program, which is why we are asking for what may appear to be major increases in this year's budget. The increase requested this year is actually $700 million less than the $3.8 billion lost to congressional actions over the last three years. Approval of our request will put us back on track in providing decent places for our people to work and live. The point is that a high priority on facility investment can make a demonstrable impact on morale, efficiency, readiness and result in decades of strengthened national defense.

SIGNIFICANT ACCOMPLISHMENTS(continued)

MODERNIZATION - STRATEGIC FORCES:

WE HAVE DEPLOYED 3 TRIDENT-CLASS SUBMARINES AND FUNDED 8 MORE THROUGH FY [illegible].

WE HAVE PROCEEDED WITH DEVELOPMENT OF THE TRIDENT II MISSILE AS WE COMPLETED PROCUREMENT OF TRIDENT I MISSILES.

PRELIMINARY WORK ON SMALL ICBM HAS BEEN FUNDED CONSISTENT WITH SCOWCROFT COMMISSION RECOMMENDATIONS.

WE HAVE FUNDED PROCUREMENT OF 18 B-1 BOMBERS THROUGH FY 1984.

WE HAVE BEGUN DEPLOYMENT OF THE B-52 BOMBER FLEET FOR CRUISE MISSILE CAPABILITY.

SIGNIFICANT PROGRESS ACCOMPLISHED IN UP-GRADING STRATEGIC COMMUNICATION AND CONTROL SYSTEMS.

WE HAVE MET THE IOC FOR GLCM AND PERSHING II.

CHART 5.—Significant accomplishments—Continued

Strategic modernization. Dangerous obsolescence threatened all three legs of our strategic triad in 1980, threatening the stability of deterrence.

Our strategic modernization program is now strengthening all three legs of the strategic triad as well as our strategic command, control, and communications systems. Three tests of the MX/Peacekeeper have now been completed, and the FY 1985 budget includes funds for production of 40 missiles and continued research on the small missile. Our first new strategic bomber in more than thirty years is in production, with 34 B–1Bs planned to be procured in the FY 1985 budget. We also have requested funds to build the twelfth Trident submarine and for development of Trident II missiles which will provide our submarine force the increased payload and improved accuracy needed to assure effective retaliation against hardened targets. Finally, our C3 systems are being modernized and upgraded.

At President Reagan's behest we are also embarking on a bold effort to examine and assess many different options to give us a reliable and effective defense against incoming Soviet ballistic missiles. This will require many years. I believe it is the most significant step we can take to preserve peace with freedom and to pass on to our children the legacy of a safer world. It is, as the President has said, far better to protect our people than to avenge them. We seek about $1.8 billion in this budget for this purpose—$250 million is new money and the balance will be reprogramed from the study of less effective, more technical ABM systems.

The strategic modernization program, the strategic defense initiative, and the direct costs of operating our strategic forces together comprise less than 15 percent of the defense budget.

Management reform.—Upon taking office we also discovered that our outdated defense procurement system failed to take full advantage of competition, and contained few incentives to reduce costs or improve efficiency. Likewise, as investments in ammunition, spare parts, and new weapons and equipment were canceled, postponed, or stretched out, cost-efficient production became impossible.

The administration undertook a wide-ranging management reform program that included a thorough and forthright audit program to identify the sources of waste and inefficiency and a comprehensive acquisition improvement program to instill sound business practices in defense procurement.

ACTIVITIES TO CURB WASTE, FRAUD & ABUSE

Audits of Internal Management of Defense Operations and Programs

18,467 Reports Potential savings: $1.6 Billion

Investigative Cases

16,357 Cases Closed

8,023 Cases Referred for Prosecution or Administrative Action

657 Convictions

Fines, Penalties, Restitutions, and Recoveries Collected from Referrals to:

Justice Department: $5.2 Million

Military Departments: $9.6 Million

DCAA Audits

57,782 Reports

$28.6 Billion in Contract Costs Questioned - $9.1 Billion Sustained

CHART 6.—Activities to curb waste, fraud and abuse

Our joint efforts with the Department of Justice to prosecute those who defraud the Defense Department are paying off in recoveries of funds for the U.S. Government and should also be a deterrent to halt future fraud. Likewise, the extensive procurement reforms begun in 1981 have become institutionalized and are now paying dividends.

PROGRAM TO END SPARE PARTS PRICE ABUSE

1. Incentives for Employees to Find Cost Savings.
2. Stern Disciplinary Action Against Employees Allowing Abuses to Continue.
3. Senior Management to Alert Contractors to the Seriousness of the Problem and Our Strong Resolve to Control Prices.
4. Services to Make the Competition Advocate Program Work.
5. Services to Refuse to Pay Unjustified Price Increases.
6. Services to Seek Refunds Where Overcharges Have Occurred.
7. Services to Cease Doing Business with Contractors Refusing to Meet Our Contracting Standards.
8. Reforms in Our Basic Contract Procedures.
9. Additional Audits and Investigations.
10. Secretary's Personal Resolve to Straighten Up the Spare Parts Situation.

CHART 7.—Ten-point spare parts reform program

We have taken firm steps to end the spare parts pricing abuses which we uncovered and reported. The ten-point spare parts reform program that I briefed to this committee last July is fully in place and working. Most importantly, we have institutionalized those reforms so they will continue to work on into the future.

MANAGEMENT IMPROVEMENTS

CREATION OF INSPECTOR GENERAL (IG)

AUDITS
INVESTIGATIONS

TEN-POINT SPARE PARTS PROGRAM

AUDITS
ADMINISTRATIVE, LEGAL , CONTRACTUAL EFFORTS

ACQUISITION IMPROVEMENT PROGRAM (AIP)

PROGRAM STABILITY
MULTIYEAR PROCUREMENT
ECONOMIC PRODUCTION RATES
REALISTIC BUDGETING
IMPROVED READINESS AND SUPPORT
INCREASED COMPETITION

ENHANCED DECISIONMAKING PROCESS

SERVICE SECRETARIES
JCS

REFORM '88 AND THE GRACE COMMISSION

CHART 8.—Management improvements

To obtain lower costs and better quality, we are stressing greater competition in defense procurement; and advocates of competition are now working in all buying commands to challenge non-competitive purchases. To assure continued competition, selected new contracts include provisions designed to provide the data necessary to seek second sources of supply in purchasing parts.

To maintain control over costs, the Defense Department is encouraging higher quality budget estimates through the application of more realistic inflation indices. This is intended to halt the past practice of over-optimistic estimates that made a weapon system appear affordable but left a legacy of cost overruns. The department is also making the tough decisions necessary to eliminate marginal programs and maintain high priority programs at stable and efficient rates.

Our reforms and improvements complement the President's Reform 1988 Program. And it is reassuring that the Grace Commission supports and encourages the department in many of our acquisition initiatives. Most importantly, they are working.

Wise investments and good business practices are giving us more defense for the dollar. But just as we must be concerned with the stewardship of the taxpayer's investment in defense, we must also consider the Nation's economic well-being. While the purpose for defense budgets is to provide for our Nation's security today and for the future, we know from recent experience that the defense buildup also has very positive effects on the economy. A large percentage of defense spending goes directly to the private sector in return for the production of new goods and services. This results in investment in plant and capital equipment, which in turn leads to meaningful, long-term jobs. This has occurred not only in basic manufacturing but is also occurring in many new areas of manufacturing technology and research.

President Reagan has set a national goal to lower the Federal deficit. I wholeheartedly support his commitment to that goal and believe that just as his firm leadership has brought us a safer, more secure peace, it will also bring us closer to a balanced budget. We in the Defense Department intend to continue to work toward that goal.

When this administration first established a defense buildup for fiscal years 1982 to 1986, an additional $186 billion in budget authority was proposed over amounts planned for that time period by the previous administration. Since then, $92.5 billion of that original increment has been deleted from Defense requirements through management actions, congressional reductions, and more favorable economic conditions in the form of lower than originally planned inflation. Specifically, last year's projections for fiscal year 1985 funding requirements envisioned a total of $321.6 billion. The budget presented to you this year requests $305 billion in budget authority for fiscal year 1985, a reduction of $16.6 billion.

STATUS OF DEFENSE OUTLAYS ADDED BY REAGAN - 1981

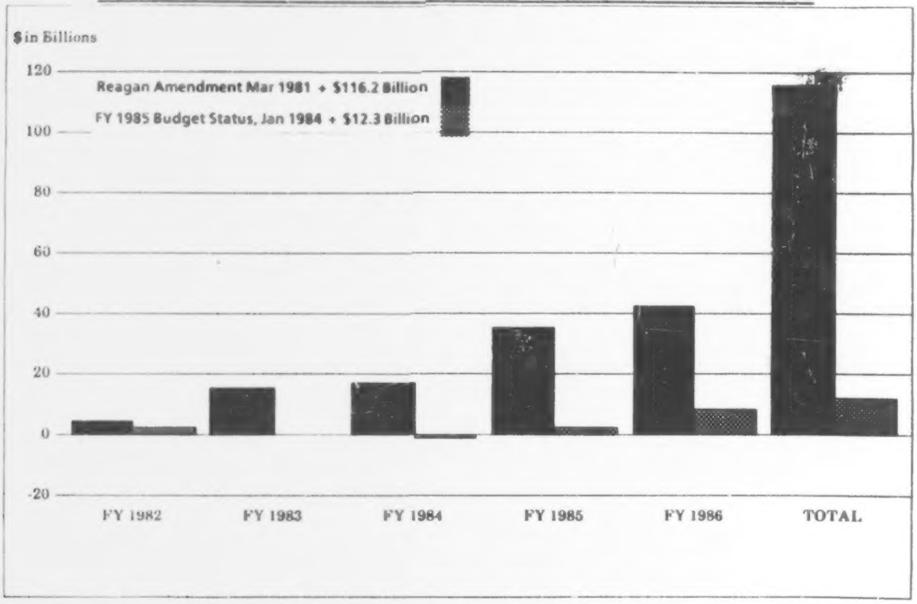


CHART 9.—Status of Defense outlays added by Reagan

Similar to the revisions in budget authority requirements but perhaps even more dramatic is the reduction in Defense outlays that has taken place since the initial Defense plan for fiscal year 1982 to fiscal year 1986 that was formulated in the early spring of 1981. Originally, $116.2 billion in Defense spending was envisioned over the outlay levels planned by the previous administration. Today, all but $12.3 billion of that amount has been removed or is now proposed to be deleted from that original Defense plan. As a result, Defense has indeed contributed a significant portion to the overall Federal fiscal constraint achieved to date.

But when considering a possible relationship between Defense spending and the deficit, we could start by looking at the economic and budgetary events of the past three years. Clearly deficits have worsened during that period and I am sure that there are a number of very well qualified economists who can explain what they believe to be the principal causes. In the case of the Defense budget, however, I can state that for the fiscal years 1982 to 1986, we will now be spending about $104 billion less than was planned in the spring of 1981. Since then, a great deal of progress has been made on the President's economic goals, such as significantly reducing the rate of inflation. This has helped to lower Defense spending, but on the other hand, there are a number of other factors besides Defense spending that affect future deficits.

By contrast, I have also noticed that nondefense Federal spending is higher now than the President proposed three years ago for fiscal years 1982 to 1986. Unemployment, though now showing a sharp rate of decline, is still above levels projected three years ago and therefore has added to Federal deficits. My point here is not to seek out the areas for blame, but just to state as directly as I can that I do not accept the notion that the recent defense buildup is the primary cause of the recent increase in Federal deficits.

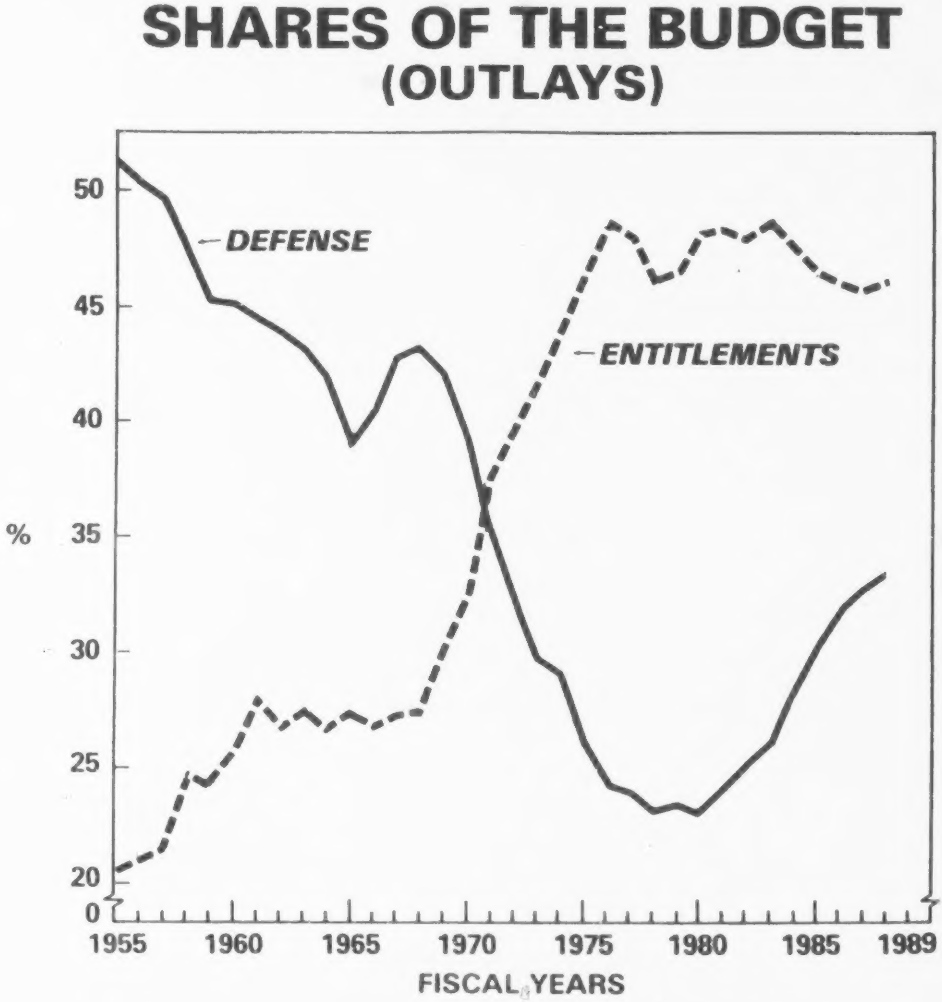


CHART 10.—Comparison of Defense/entitlements spending

In fact, if we look at the trends of the past decades we can see that even with our necessary increases to redress the neglect of the past, defense's share of the Federal budget and GNP are still lower than the 1950s and 1960s. In 1955, the defense budget comprised more than 50 percent of the Federal budget. This share dropped precipitiously from 1955 to a low of 23 percent in 1980, except for a brief upturn during the Vietnam years. The fiscal year 1985 defense budget represents about 29 percent of total Federal spending. During this same timeframe, payments to individuals (entitlements) have shown the reverse trend. In 1955, these payments represented about 20 percent of the budget and are expected to peak in 1983 at nearly 50 percent. These programs include: Social security, unemployment compensation, housing assistance, health care services, food and nutrition, and educational assistance.

COMPARISON OF PUBLIC SPENDING TRENDS

OUTLAYS

(PERCENT CHANGE)

FISCAL YEAR	NATIONAL DEFENSE	All OTHER FEDERAL	STATE & LOCAL
1970-1980	-19%	+88%	+30%
1981-1983	+22%	+7%	+1%
1970-1983	+3%	+106%	+32%

CHART 11.—Comparison of public spending trends

Another interesting comparison is the percentage change year-to-year by the major components of public spending. Here, too, we see that until this administration, defense spending ran counter to the trends being experienced in other public sectors. Since 1970, growth in real nondefense spending, including Federal nondefense and state and local governments, has consistently outpaced growth, average growth in defense spending for the period 1970 to 1983 was defense spending began to increase somewhat, growth in nondefense spending remained higher. It has only been in the last three years that defense spending has grown more than nondefense spending. Still, even with this recent growth, average growth in defense spending for the period 1970 to 1983 was only 3 percent compared with 106 percent for Federal nondefense and 32 percent for State and local.

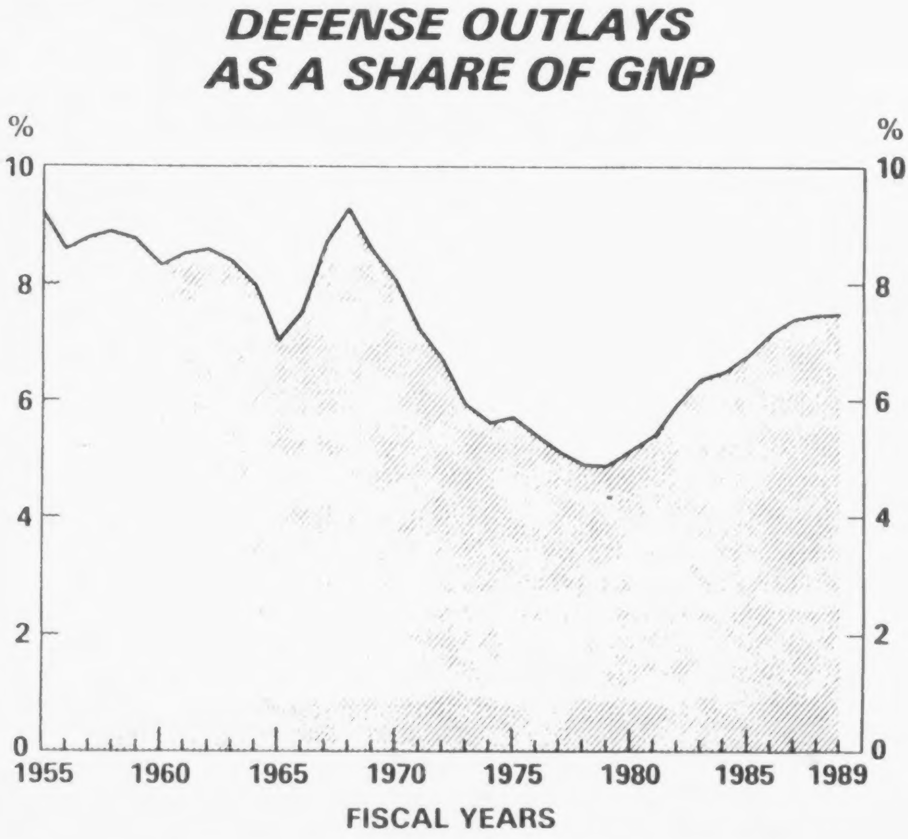


CHART 12.—Comparison of Defense share of GNP

Further, as you address the allocation of our Nation's resources to meet national priorities, it is important perhaps to put the defense share of our economic resources in perspective. Measured in terms of the country's gross national product, the fiscal year 1985 budget represents a defense share of around 7 percent and by the end of the decade is projected to be 7.5 percent. This level is still well below many of the past years. I think it is safe to say that defense outlays consume a reasonable share of our nation's resources, and this share is affordable.

The defense program we are presenting to you provides the United States the most prudent and effective means of doing its share to protect the well-being of our free and productive societies. It is also an affordable program.

But let us have no illusions: The next few years will be as crucial for America's defense program as they will be difficult. As the bills that we as a Nation put off too long continue to come due, it will be tempting to search for excuses to avoid the reckoning once more. We must not yield to that temptation. Already Congress has cut back on our operation and maintenance large congressional reductions in investment will slow down development and acquisition programs, increasing the cost of what all agree we will need, and courting the dangers inherent in taking too long to secure an effective deterrent. Already critics of the defense budget are discovering a new enthusiasm for weapons that are—conveniently—still on the drawing boards, even as they oppose procurement of hardware available now to strengthen our forces.

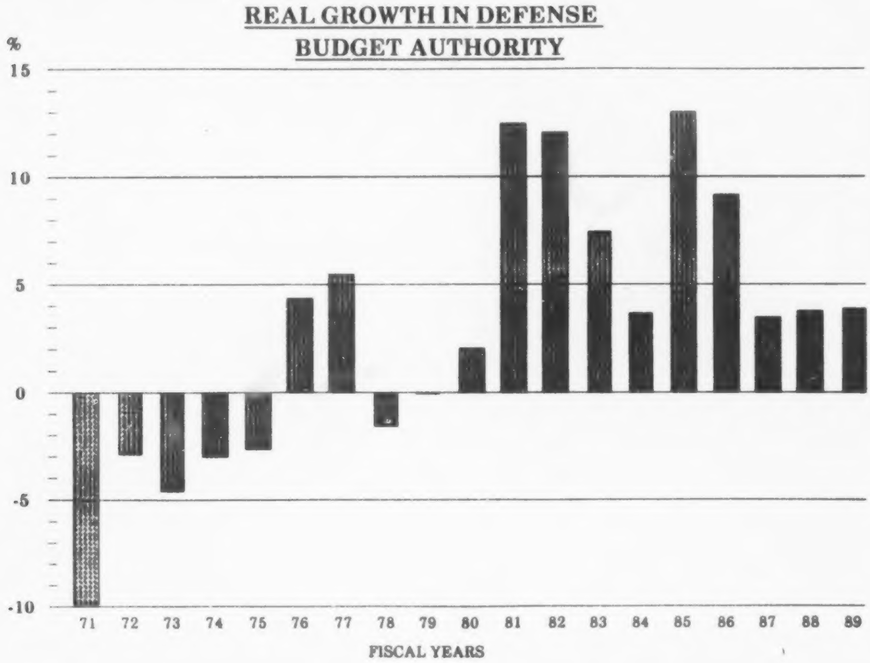


CHART 13.—Growth in Defense Budget, 1981–87

Unfortunately, several years of strong defense budgets cannot make up for a decade of neglect. Restoring—and then maintaining—the military balance requires a determined and sustained effort. The deep cuts imposed by Congress in the FY 1984 budget request distort the base from which an apparent large increase in real growth is requested. In reality, for the four fiscal years addressed by this administration, including FY 1984, the defense budget in real terms shows an average annual increase of over 8 percent per year. If we fail to restore the momentum of our defense program and stop in midcourse, we will only endanger the progress we have made in recent years, and invite speculation by friends and adversaries alike that the United States can sustain neither its will nor its leadership.

FY 1985 DEPARTMENT OF DEFENSE BUDGET

LONG RANGE FORECASTS

	1984	1985	1986	1987	1988	1989
BA ($ BILLIONS)						
MILITARY RETIRED PAY *	16.6	17.6	19.4	20.9	22.5	24.0
OTHER MILITARY FUNCTIONS	241.6	287.4	330.2	358.3	389.0	422.1
TOTAL,CURRENT PRICES	**258.2**	**305.0**	**349.6**	**379.2**	**411.5**	**446.1**
TOTAL,CONSTANT (1985) Prices	***269.9***	***305.0***	***333.0***	***344.7***	***357.9***	***371.7***
PERCENT CHANGE	3.7%	13.0%	9.2%	3.5%	3.8%	3.9%
OUTLAYS ($ BILLIONS)						
MILITARY RETIRED PAY *	16.8	17.4	19.3	20.9	22.5	23.9
OTHER MILITARY FUNCTIONS	214.2	247.0	282.5	318.3	347.3	374.9
TOTAL,CURRENT PRICES	**231.0**	**264.4**	**301.8**	**339.2**	**369.8**	**398.8**
TOTAL,CONSTANT (1985) Prices	***241.8***	***264.4***	***286.7***	***306.8***	***319.5***	***330.1***
PERCENT CHANGE	8.8%	9.3%	8.4%	7.0%	4.1%	3.3%
COMPOSITE PAY/PRICE ASSUMPTIONS FOR OUTLAYS (FY 1985 = 100%)	95.5	100.0	105.3	110.6	115.8	120.9

* Retired Pay is on a cash basis in FY 1984 and on an accrual basis thereafter.

CHART 14.—Long range forecasts

By the same token, if we are allowed to continue on the path we have set, we can look forward to a time, only two fiscal years from now, when defense increases can begin to slow dramatically. The initial defense recovery program planned by this administration in 1981 encompassed five fiscal years. If we can maintain the resolve to support the remaining requirements of our defense buildup for these last two fiscal years, then we will benefit from a stronger defense and begin to see a declining rate of growth in future defense requirements. This is clearly demonstrated in the fiscal year 1985 long-range forecast that shows the rate of growth in both budget authority and outlays beginning to decline.

During the coming months you will confront important—and difficult—budgetary decisions that will shape America's security through the end of this century. Over the past three years, Congress and this administration have worked together to rebuild America's defenses and restore our leadership in the world. We have made great progress. This year let us again work together to preserve our gains and move closer to our goal of a stronger and more secure America, the best guarantee of a lasting peace.

Chairman TOWER. Thank you very much, Mr. Secretary.

General Vessey?

STATEMENT OF GEN. JOHN W. VESSEY, JR., CHAIRMAN, JOINT CHIEFS OF STAFF

General VESSEY. Mr. Chairman and members of the committee, Secretary Weinberger has covered the major points of the budget. He has laid out clearly the need for a strong defense and why this budget is the basis for that defense.

I have a short prepared statement that I ask be put in the record. I have a couple of other points that I would add to the Secretary's statement.

Chairman TOWER. Anything you want to submit will be incorporated in the record, General.

[See "United States Military Posture Fiscal Year 1985," prepared by the Organization of the Joint Chiefs of Staff, for Gen. John W. Vessey, Jr., Chairman, Joint Chiefs of Staff; p. 406.]

General VESSEY. I tell you that the health of our Armed Forces is good. This trend is most evident in the quality of the men and women we now have in uniform. From my visits around the world to our forces, I can tell you the soldiers, sailors, airmen, and marines we have now are the best I have seen in almost 45 years I have been in uniform. The Congress and the executive branch have made this renewed strength possible. On behalf of the men and women of the Armed Forces and on behalf of my colleagues on the Joint Chiefs of Staff, I want to thank you for your support.

We talk a lot about hardware, but people are at the heart of our Armed Forces. We are filling up the shortages in skilled manpower and have been doing that for the last 3 years.

Recruitment and retention remain excellent. This Nation needs to continue to make military life attracive or we simply won't keep good Armed Forces.

The operational commanders in the field report renewed confidence in their forces. New, good equipment from long-delayed modernization is now coming into the hands of our soldiers, sailors, airmen, and marines, and is going where it counts most in our operating forces. Our forces are well-trained and well-led.

In talking to the military leaders of our allies, I find that they, too, are reassured by the restored strength of American Forces.

These facts must serve as an incentive for Soviet restraint and the growth of our strength will eventually provide a climate for sensible negotiations with the Soviets.

I say to you that this Nation should not slack off. This is a key year for the United States and its defenses.

REVERSING THE DECLINE OF THE SEVENTIES

Last year I reported to you that we were making progress in reversing the decline of the seventies in our general purpose forces and that we were in the early stages of modernizing our strategic nuclear deterrent forces. It is important that we press on with both of these. It is important to remember that while we are making progress, the Soviets are not standing still, as you can see from the Secretary's charts and graphs.

They continue to field increasingly capable equipment and already large modern conventional forces. This year it looks like they will conclude a significant phase in the modernization of their ICBM's while we have yet to put one of our new Peacekeepers in a silo. The Soviets continue to fish in troubled waters in the resource-rich Third World.

When I look at the Soviet forces, I see forces which are large, very capable, they are offensive forces, and they are increasingly capable of achieving the Soviet wartime objectives. I see their willingness to use those forces, both for coercion and in actual war.

When I look at our forces, I see that our forces are designed for deterrence. That has been our strategy and it is a sensible strategy. We hope that we can make it clear to the Soviets or any other aggressors that they can't achieve their objectives by war or by threat of war. Since World War II we have attempted to build and maintain the kind of forces that will make our deterrent strategy credible and preserve the peace and our way of life.

The Joint Chiefs have looked at the strategy and the threat. We believe this budget will better assure the security needs of the Nation.

Our Nation need not match the Soviets weapon for weapon, man for man, nor should we neglect other elements of our national power.

The Nation absolutely must continue to deal realistically with the unrelenting growth of Soviet power and reality of increasing interdependence in a dangerous world.

I urge the members of this committee and the Congress to remember that crises can come on short notice and if we have not done the planning and built the forces in advance, we simply won't be able to deal with the crisis.

A year ago today we were in front of this committee with the presentation of last year's budget. There was a statement made by Senator Jackson that impressed me greatly. I have remembered it and recorded it. I would like to read a bit from it because I think it fits today as well as last year. He said:

> I would hope that this would be a time of steadiness, a time when we can go about our work in a manner and in a way that will demonstrate to the world that we can provide a very strong and steady hand in a very unsteady world.
>
> I think that this is the challenge that we all face because the world looks to this country, with only seven percent of its population, and the world expects bigger things than we are capable of providing.
>
> Above all else, we need to proceed with steadiness, not only in reality but in appearance that will give confidence to others.

Thank you.

[The prepared statement of General Vessey follows:]

PREPARED STATEMENT OF GEN. JOHN W. VESSEY, JR., USA, CHAIRMAN OF THE JOINT CHIEFS OF STAFF

Mr. Chairman and members of the committee: The U.S. military posture has improved from the low point of the 1970s. Commanders in the field report renewed confidence in their forces. The resources provided have permitted them to reverse the decline in the total force readiness and sustainability of existing forces. Moreover, these resources are a firm foundation upon which to continue to build the deterrent forces which, together with those of our allies, are necessary to protect the Nation's interests for the remainder of this century. The Congress and the executive branch have made this possible. And, on behalf of my colleagues on the Joint Chiefs of Staff and the men and women in uniform, I thank you for your support.

The Nation's military forces are good and substantial progress is being made in overcoming past deficiencies. Many programs are beginning to show positive effects with the operating forces. Good people are the heart of our forces, and we're filling up the shortages in skilled manpower. Recruitment and retention are excellent. New, good equipment from long-delayed modernization is now coming into the hands of our soldiers, sailors, airmen, and Marines where it counts most. Our forces are well trained and well led. In talking to military leaders of our allies and friends, I find that they, too, are reassured by the restored strength of American forces. These facts serve as an incentive for Soviet restraint, and the growth of our strength will eventually provide a climate for sensible negotiations.

However, the Nation should not be complacement, nor accept the notion that these past three years can somehow erase the decline in real growth over the

1970s or eliminate the gap caused by the continued growth of Soviet power. Reductions in the President's requested budget this past year have slowed the momentum of revitalization. This slowed rate of growth in force capabilities will affect readiness and retard responsiveness in a crisis. The Joint Chiefs of Staff have looked at the threats to our Nation's security and at our strategy. We believe this year's budget is sensible; it is a reasonable response to threats to national security and to the requirements of the military strategy of the United States.

THREAT

The U.S. military posture—the ability to protect U.S. interests—is affected by many variables. Growing Western interdependence and Third World instability are dynamic influences on national security. While we were restoring our strength, the Soviets were not standing still. The momentum of the Soviet military buildup, unequalled in peacetime, will carry Soviet force expansion and modernization programs well into the 1990s. With this pace of modernization over the last ten years, the Soviets have produced three times as many aircraft and four times as many tanks and other tracked vehicles than has the United States. They also have deployed a large and powerful navy. Soviet conventional forces can dominate the Eurasian land mass, endanger our vital lines of commerce, and simultaneously threaten U.S. and allied interests in Europe and Asia. Even a limited confrontation with the Soviet Union immediately could have global implications.

The Soviets continue to modernize their strategic nuclear forces. In 1982 alone, they deployed over 1200 highly accurate intercontinental ballistic missile warheads. They deployed another 200 ICBM warheads in 1983, which will lead to the completion of a significant phase of their strategic ICBM modernization this year. All this is taking place and we have not yet deployed a single Peacekeeper missile. These Soviet missiles with a total of over 5000 warheads are being placed in the world's hardest silos and are linked with a redundant, survivable, and reliable command and control network to the Soviet leadership in well-protected sites. The Soviets have also strengthened their theater nuclear forces. Even as we negotiated, they deployed SS–20s at the rate of one a week and improved their theater nuclear forces in Eastern Europe. The Soviets claimed no nuclear weapons were in East Europe and that recent deployments to Eastern Europe were in response to our deployments of Pershing II and GLCM. The facts are that Soviet levels of new tactical nuclear systems reflect decisions made years before we deployed Pershing II and GLCM.

Soviet military power impedes the peaceful resolution of Third World problems and contributes to regional instability in ways that could promote wider conflict. The Soviets are not the only source of turbulence in the world. In the case of international terrorism, there are many causes and sponsors. In Central America and Lebanon, centuries of injustice, poverty and violence have led to the dangerous situations that exist today. But the Soviets seek to gain from international turmoil. Together with clients and surrogates, the Soviets are attempting to weaken the ties between the United States and its allies and to establish their own patterns of influence throughout much of the Third World.

STRATEGY

The basic national security objectives for U.S. Armed Forces is to help preserve the United States as a free Nation with its fundamental institutions and values intact. This Nation and its allies seek to provide security and protect our way of life by preventing war. Our strategy is defensive; it is based on deterrence. Should deterrence fail, the strategy is to restore peace on favorable terms, and at the lowest scope and intensity of warfare consistent with our objectives.

Strategy guides the development as well as the deployment of US forces. Because of the great distances from the United States to areas of vital interests and the relative nearness of the threats to those interests, this Nation has maintained forward-deployed land, naval, and air forces since the end of World War II. These forces lend political and military strength to our alliance strategy by a visible demonstration of the strength of the US commitment—putting potential aggressors on notice that an attack will be met immediately by allied opposition that includes the United States.

We maintain a strong, central reserve of Active and Reserve forces in the United States, ready to reinforce those forces forward-deployed with our alliances, and to protect U.S. interests in other regions where there are no forward-deployed forces or where friends ask for help.

Because U.S. forces will likely remain small relative to the requirements we have for them, they need to be as effective and flexible as possible. Superior training and superior equipment are required. Our forces must be fully equipped with modern equipment to give them the necessary technological edge over a numerically superior enemy. Our forces must be well-trained. Top-notch training is the decisive edge in combat effectiveness and it allows us to get the most out of our equipment.

U.S. commanders rely on good intelligence to warn and inform the forces and on effective and survivable command and control systems to direct their most effective use. As has always been the case, superior mobility and control of the key sea lines of communication will be essential to help make this strategy work. We have come to rely increasingly on space for command and control. However, because the Soviets have fielded the world's only operational anti-satellite weapon, space can no longer be considered a sanctuary.

Our nonstrategic nuclear systems are essential to our deterrent strategy of flexible response. These systems deter Soviet aggression by countering Soviet theater nuclear systems and by providing the capability to respond at whatever level of intensity necessary to prevent the Soviets from achieving their war objectives.

Over-arching all the components of our strategy, the strategic nuclear triad and its associated command and control systems provide the strategic deterrent so essential to peace. We require modern, ready, strategic nuclear forces in sufficient numbers to make it clear to the Soviets that their war objectives cannot be achieved if they resort to strategic nuclear war.

IMPLICATIONS FOR OUR FORCES

The budget supports the strategy. Much of the budget is dedicated to the shorter-term needs of the existing forces, and supports the progress of the Services in restoring the vitality and the health of the total force. We urgently need to sustain that vitality. At the same time, the budget provides an effective, sensible program for modernization accompanied by modest growth in the size of our forces and appropriate R&D support.

The Joint Chiefs believe the proper balance has been struck—the balance between providing for present needs in readiness and sustainability and ensuring future capabilities through modernization. Inherent to this balanced approach is reliance on our technological base. The modernization programs are jeopardized by Soviet successes in acquiring Western technology. The Nation urgently needs to protect the technology which gives us the qualitative advantages so necessary to give our forces an edge over potential enemies.

FORCE READINESS AND SUSTAINABILITY

Improving the warfighting efficiency of existing forces to deter and, if necessary, to fight at any level, intensity, and location remains top priority. We don't know when or if war will come. The forces must be ready. The success of this Nation in battle depends critically on our ability to respond rapidly with well-trained, well-equipped, properly supported forces, and to sustain those forces. In turn, wartime readiness depends on how well the Nation performs the peacetime functions of preparing for war.

Existing forces are now more capable of executing the strategy. Under this budget Services will continue to provide new equipment to the forward-deployed forces and to those early-deploying forces in the central reserve in the United States. Priority is given to those first to fight, to include the Reserve Component Forces. Many Guard and Reserve units are receiving first-line equipment—including the M1 tank, the M2 Fighting Vehicle, the F–16 fighter, the *Perry* class Guided Missile Frigate, and modern tactical communications equipment.

To tie these forces together, the Commanders in Chief of the operating forces and the Joint Chiefs are continually refining joint doctrine, combined training and exercises. Flying hours, battalion training days, and steaming hours will be increased over the fiscal year 1984 levels. A 16 percent increase in joint exercise funding will allow some 70 joint and combined exercises. The exercises are essential to readiness and to evaluate U.S. strategic plans. Such joint and combined exercises have the further advantages of showing our resolve and of improving the ability of the forces from the various services to operate effectively with U.S. allies.

The capability of the forces of all Services to work together effectively and with forces of other countries is a major part of our coalition strategy. This strategic imperative is manifested in our unified command structure. The key players in implementing this strategy are the Commanders in Chief of the Unified and Specified Commands, the CINCs. They are our operational commanders and provide oversight of our forces, as well as the direct interface with our allies.

Accordingly, the Joint Chiefs of Staff, in cooperation with the Secretary of Defense, are actively working with the CINCs to meet their needs. This is evident in the development of joint doctrine. The CINCs now have a direct role in the development of operational concepts. The CINCs have been deeply involved in creating this budget by personally presenting their warfighting and operational needs.

The CINCs need and have asked for a source of funds to meet urgent, near-term readiness and warfighting requirements. At present, when unforeseen requirements arise, the CINCs' only recourse is to seek funding through the Services—a lengthy process which may not be responsive. To satisfy unanticipated readiness problems, we propose a special fund. The fund would be managed by the Joint Chiefs who are in the best position to evaluate the urgency and priority of a request.

Another peacetime function essential to warfighting effectiveness is sustaining the forces. Substainability gives our forces staying power both in peace and war. Forces that cannot be sustained can be outlasted, and deterrence gained by modernization and readiness becomes less credible. This budget will allow the Services to continue the progress they have made. Stockage levels are programed to increase; and depot maintenance is improving, as are substainability levels.

SUPPORTING OUR ALLIANCE STRATEGY

We are working to encourage our friends to improve their ability to act in their own behalf or with us in the defense of common interests. In so doing, we make a contribution to our own security. In implementing our global strategy, allied host nation support and security assistance stand as two of the most cost-effective measures. For example, better security assistance terms, and larger quantities, are urgently needed *right now* in Central America. Effective security assistance to this troubled region will help to improve the security situation so social, political and economic reform can progress.

STRATEGIC FORCES

The United States has placed a high priority on modernizing its strategic forces. This broad effort includes making command and control systems more responsive and survivable, improving strategic warning capabilities, and improving all legs of the triad. The Joint Chiefs fully support the conclusions of the Scowcroft Commission that the nuclear weapons modernization programs are essential both for deterrence and to create the climate for meaningful arms reduction negotiations. The development and deployment of the Peacekeeper missile, Trident submarine system, B-1B and Advanced Technology Bomber, air-launched cruise missile, and a new small, single warhead ICBM are essential programs to insure the U.S. strategic deterrent.

This is a key year for the United States. This Nation has delayed strategic nuclear modernization and we are now faced with the need to modernize all three legs of the triad at the same time. The Soviets have built a strategic nuclear force capable of achieving their war objectives. We ned a force which will make it clear to them they cannot achieve those wartime goals. The Trident submarine program and the D5 missile will modernize our aging Poseidon fleet. The Peacekeeper will upgrade our ICBM force to offset the imbalance caused by Soviet deployment of modern, hard-target capable ICBMs, while research proceeds on the small missile. The B-1B will provide a survivable, responsive bomber force able to penetrate Soviet defenses well into the 1990s. We need to go ahead with these programs to assure the credibility of our strategic deterrent.

A major effort to modernize our strategic command, control and communications (C^3) systems continues in this budget request. In order to assure the capability to detect and provide warning of an impending attack, sensors, command centers and their supporting communications are being hardened against nuclear effects. Our C^3 systems are being designed for increased survivability as well as redundancy and improved interoperability of key command facilities.

The Joint Chiefs support the President's initiative to have this Nation employ its technological talent to seek an alternative to sole reliance on offensive retaliation. In consultation with our allies and with the U.S. scientific community we are exploring means which provide the hope that we can end the dominance of offensive nuclear weaponry.

NONSTRATEGIC NUCLEAR FORCES

Nonstrategic nuclear forces are a key part of our strategy of flexible response. The modernization of our nonstrategic nuclear systems with the fielding of Pershing II, modernized field artillery warheads, and ground-launched cruise missiles, as well as associated command and control, will improve effectiveness; reduce risks to allied territory; and improve safety and security. With the continued cooperation of NATO and the support of the Congress, the new long-range systems will serve to counter Soviet SS-20 deployments and strengthen the credibility of our deterrent posture.

CHEMICAL

The Joint Chiefs place great priority on modernizing the U.S. retaliatory chemical munitions stockpile. U.S. forces are improving their ability to defend against chemical attack, but the Congress must clearly understand that the lack of a modern chemical retaliatory capability will have our forces fighting at great disadvantage. Additionally, unless we take steps to modernize our own chemical munitions, we provide little incentive to the Soviets for a meaningful verifiable arms control agreement prohibiting chemical weapons. This budget provides for long leadtime items and facilities in order to begin production in fiscal year 1986. We urgently need to move forward in the production of modern chemical munitions to make our chemical warfare deterrent credible.

NEGOTIATIONS

The Joint Chiefs fully support efforts to gain genuine, mutual, equitable and verifiable reductions in armaments. Arms control and other related negotiations are being pursued with the idea that equitable and verifiable agreements can contribute to security at reduced force levels. Arms control should not be viewed as a substitute for force modernization; rather, arms control and other defense efforts should be mutually reinforcing.

Any agreement is only as good as the willingness of the signatories to comply with the obligations assumed. Soviet violations or probable violations of provisions of several agreements presently in force show a disturbing pattern of Soviet behavior. This behavior must be taken into account in the development of U.S. defense programs and approaches to arms control.

CONVENTIONAL FORCES

In this age of nuclear parity and with conventional and low intensity conflicts widespread throughout the world, conventional forces are the mainstay of our force structure. In this budget, land forces are being reorganized to improve flexibility and to capitalize on the effectiveness of newly introduced weapons, such as the Abrams tank, Bradley fighting vehicle, Apache helicopter, and Multiple-Launch Rocket System (MLRS). Improvements to and modernization of Active and Reserve Army divisions, to include the new light division concept, will enhance global flexibility. Naval forces continue to build toward a 600-ship Navy with 15 carrier battle groups, 4 battleship surface action groups, modernized attack submarines, and amphibious lift for Marine amphibious forces. We are procuring the best fighters flying today. We need to continue to procure such aircraft and modernized munitions as we build and strengthen the Air Force toward 40 tactical fighter wing equivalents. Modern, survivable, high-capacity tactical communication systems are being obtained to provide adequate, secure and reliable information distribution systems. This budget will also improve the ability of special operations forces to support the needs of the CINCs at any level of conflict.

MOBILITY

Our strategy calls for a rapid-reacting central reserve and the transportation to move it. Budget requests for the Navy and the Air Force recognize the importance of supporting the other Services in deploying their forces. Progress is being made to improve sealift and airlift: the maritime Ready Reserve Force is expanding, the purchase of KC-10As is funded, C5A improvements are underway, and KC-135 reengining and conversion of fast sealift SL7s are well-along and need to be kept going. The Army and Marine Corps have taken measures to improve the capabilities of their forces to deploy. For instance, maritime pre-positioning for the Marines and the Army's light divisions will improve their mobility.

PEOPLE

No matter how good the strategy or how excellent the equipment, good people will remain the heart of our defense forces. Well-trained, highly motivated Service members are fundamental to combat readiness. This Nation has very good people in its Armed Forces today because of the Nation's renewed pride and faith in those people and the willingness to pay the price for adequate security. The people in our Armed Forces are willing and ready to go wherever this Nation asks them to go to protect our vital interests. Their tasks are difficult and dangerous. Very much a part of their willingness and readiness to do these difficult tasks is the sure knowledge that we as a Nation will provide for their needs. The men and women in uniform need to know we will give them the best possible equipment and training for their difficult tasks, and they need to know this Nation will provide reasonable pay and compensation for them and their families.

There are a number of proposals being studied now with respect to compensation and retirement. I urge the Congress in reviewing these issues to remember the unique demands of military service. The Armed Forces need to have confidence that trends will not be set in motion that will erode pay and other benefits or return the forces to the unstable personnel picture of the 1970s. In the case of retirement, it is not a pension system; it is an integral part of a lifetime, career compensation program. It is a means to shape the age and skill mix of the force. The military profession is still a young person's calling and the retirement system for the Active and the Reserve Forces must account for that.

CONCLUSION

As the Congress considers the Defense budget this year, I urge the members to remember that crises too often give little warning of their approach. Orderly preparation is not possible once growing tensions indicate immediate danger. An Army, Navy, Air Force and Marine Corps—in being and constantly maintained in readiness—support the other elements of our national power, give weight to diplomacy, and deter aggression.

The Soviets will not stand still. They will continue on the path they have begun, fielding increasingly capable forces on the land, on the sea, in the air, and in space. Our Nation has no plans to match the Soviets weapon for weapon, and the Joint Chiefs do not suggest a neglect of the other elements of our national power. However, this Nation simply must do what's needed to be done to counter the Soviets with forces which deny the utility of Soviet military power for coercion of war.

The Joint Chiefs of Staff believe that our strategy provides this Nation with a sensible approach to preserve the peace and protect our national security. It is a strategy which makes it clear to potential aggressors they cannot achieve their goals by war or by the threat of war. The success of our strategy will continue to rely on the ability of the Nation to provide ready, modern forces. The Joint Chiefs believe that the budget for fiscal year 1985 will do that. This budget provides the necessary resources to assure the revitalization of our Armed Forces and the continued effectiveness of our strategy.

Chairman TOWER. Thank you, General Vessey.

Before we proceed to questions, let me suggest to my colleagues that questions relating to details of programs that are the specific authority and responsibility of the individual services be reserved until such time as we hear from the service secretaries and service chiefs so that we can address ourselves primarily in this hearing to the general policy matters that have been outlined by the Secretary and General Vessey.

Mr. Secretary, a recent Washington Post article suggested that our military forces have had disappointing results since World War II because military leaders were trained to be bureaucrats, not creative and imaginative military thinkers or operational commanders.

What is your comment on this critique and I also would like to hear from General Vessey.

Secretary **Weinberger.** I would say it is quite wrong. It would not be the first time.

It seems to me that it is a very easy criticism to make, of course. It is in such general terms that it has no specific application.

In the years that I have been here I have certainly seen commanders who have been trained to be commanders and are commanders and were carrying out their assignments with very great skill, professionally as well as personally.

Of course, the activity we had to carry out in Grenada was an extremely good illustration and an example of that as far as I am concerned.

I don't find that we have any situation in which our commanders are locked behind desks or are prevented from exercising the kind of leadership and personal military skills for which they have been extremely well trained.

We have had situations in which the policy formations of the Government in other years have put very serious hobbles and leashes on the abilities of these commanders because we have been put in a situation in which they have been told we did not intend to win or it was not important enough for us to move beyond a certain point or that we were being sent someplace to send signals.

It is a little difficult to exercise the kind of leadership and skills in which you have been trained under those circumstances. I see no evidence to support the statement made in the argument you quoted.

Chairman **Tower.** General Vessey, what is your comment?

General **Vessey.** I would say to you, Mr. Chairman, that the Armed Forces of the United States are well-trained and well-led, but it is important that we recognize that that training and leadership have to be attended to every day.

The readiness of the Armed Forces is like bread. You buy baked bread today, you have it fresh and you eat it today. You can't put training on the shelf and leave it there.

You have to train the Armed Forces continually to keep them ready. It is very important that we support that sort of training that will make sure that our Armed Forces today are ready.

Secretary **Weinberger.** There is in that connection a large budget item comparatively speaking for military exercises and it is a very vital part of what General Vessey just mentioned.

COMPETITION IN DEFENSE PROCUREMENT

Chairman **Tower.** Mr. Secretary, to what extent has competition in defense procurement increased over the past 3 years or indeed has it increased?

Secretary **Weinberger.** Yes; it has increased. We have made a deliberate effort to increase it. We have to look first of all at the context of the universe.

If the contract awarded is a follow-on contract or second or third phase of an initially awarded contract after competition, then in all likelihood, in about 99 percent of the cases, you will continue to procure from that company as the only one in a position to deal with it. So, you have really to drop out that kind of follow-on contracts.

But in contracts where there is a true competitive situation, we have almost doubled the number of dollars awarded competitively in the 3 years we have been here. This translates to about a 12-percent increase in the competitive rate.

We have made a major effort to do that. In some cases we are barred from competition, as in the case of the engine for the M-1 tank where the Congress has forbid even us to use more than one source.

We try our best to increase competition in every way we can as with the new aircraft fighter engine contract. This award will be announced shortly. The benefits of competition, I think, will be seen there.

INCENTIVE TO MINIMIZE COSTS

Chairman Tower. Mr. Secretary, to what extent have defense contracts today included an incentive for the manufacture of a weapon system to minimize its cost?

Secretary Weinberger. We have a number of situations in which we are trying to put incentives in contracts. These penalize for poor performance and reward for good performance. We have share lines, as they call them, in these contracts in which the benefits of early production and early delivery, are recognized.

There is an incentive to the contractor to do that provided it is consistent with the quality control that we require. That again is something that I believe very strongly in.

I think we should have both incentives and penalties. Incentives for good early performance within budget and penalties for performances that are late or of poor quality to the point where the contractor is considered nonresponsible and not used again by the Department.

COST GROWTH

Chairman Tower. Mr. Secretary, has the cost growth in major weapon systems been reduced during your tenure?

Secretary Weinberger. I am sorry?

Chairman Tower. Has the cost growth in major weapon systems been reduced during your tenure?

Secretary Weinberger. We believe it has. Cost growth is a continuing problem and a continuing cause of great worry. We have had at least one or two quarters in which we have been able to report no cost growth for major weapon systems.

One of the things we are trying to do here, Mr. Chairman, and I am doing it with the major contracts now, is to have the Secretaries review the major programs at least every 2 weeks.

There are only two questions asked in these reviews. Are you on time and are you within or under budget?

If the answer to those two points in the systems involved in the large contract is no, then we try to find out exactly what the problem is. By that means we have caught quite early in the process a number of things that were leading to cost overruns.

For example, the *Ohio* class submarines. When we came in, the first one was not delivered, it was 22 months late, actually a little more than that. It was way over budget.

We felt that insufficient attention was being paid to that. The suppliers were much more interested in the contracts they had that were more profitable.

We revised the contracts. We made incentives for getting them there on time and penalties for not. As a result, we now have three of the *Ohio* class submarines, and we are on schedule for the delivery of the complete authorized amount.

That is what we have tried to do in each of these situations. I think the principal problems have been not enough direct executive attention paid to it and the other has been a very large number of modifications that occur during the process.

As you know, the M–1 tank took over 20 years to bring on line, which is, of course, completely indefensible, but it is important that we note part of that is because the tank was substantially redesigned many times.

The B–1 bomber was originally authorized in 1971 in the budget, the money put in 1971, but the design was changed at least 3 times.

So, it was not completed when it was canceled in 1977. We have simply refused to make changes or indeed any changes once the design is fixed. We lock it in, proceed, and then watch it very carefully.

Chairman TOWER. That is not to say, however, that you resist product improvement after you have a few production models?

Secretary WEINBERGER. If it is genuine improvement as opposed to new gadgets, we are obviously receptive to that.

Some of the changes in the tank were in that category. We simply don't feel we have 20 years to wait and develop a tank when during that whole period if we had to go to war, we would have had to send men to war in a tank we knew was inferior.

That is a responsibility I don't want to assume.

BALLISTIC MISSILE DEFENSES

Chairman TOWER. Mr. Secretary, historically our country has resisted developing ballistic missile defenses because we regard such defenses as destabilizing.

Given the President's recent emphasis on space-based missile defense, have we now changed our view on this matter?

Secretary WEINBERGER. I hope so. The idea that we would be perfectly safe if we had no defense at all was one that was quite prevalent. As a matter of fact, it still represents, I suppose, the conventional wisdom.

It was based on the assumption that both sides, Soviet and United States, would stay equal in offensive power and neither would do anything about acquiring defensive power.

That turned out to be a rather tragic mistake. We are now regaining the deterrent capabilities that we need in our strategic systems, but at the same time the President has what I believe is a very noble concept and that is to try to develop a means of protecting people instead of avenging them and try to develop a system that will be a thoroughly reliable defense against incoming Soviet missiles.

It is a very big, difficult job. We have money in the budget to start the research on it. It is vital, I think, that we proceed that way.

If we can achieve it, and I hope and believe we can, then we will have a method of rendering impotent these missiles and removing the nuclear shadow that has been around the world for a very long time.

More than that, Mr. Chairman, it is absolutely vital that we do it because the Soviets have been heavily engaged in this exact kind of work since at least 1967.

If they should develop this capability and we do not have it, I think it would be self-evident what kind of world that would be.

If we knew that our missiles no longer had any deterrent capability whatever and the Soviets had the ability to defend against them completely and effectively, and that is exactly what they are working on, then I think we can readily imagine that we would have to give in to practically every demand made on us.

Chairman TOWER. Thank you, Mr. Secretary.

Senator Nunn?

Senator NUNN. Thank you, Mr. Chairman.

Mr. Secretary, thank you for your presentation this morning. I think it was thorough and directed itself to a good many of the points that a lot of us have questions on.

MILITARY STRATEGY OF THE ADMINISTRATION

Mr. Secretary, in last year's posture statement, and I think this was also in the 1983 posture statement, there was a statement that came the closest, it seemed to me at that time, articulating the strategy, military strategy of the administration. I quote:

> Our long-term goal is to be able to meet the demands of a worldwide war, including concurrent reinforcement of Europe, deployment to Southwest Asia and the Pacific and to support other areas.
>
> Given the Soviet capability to launch simultaneously attacks in Southwest Asia, NATO, and the Pacific, our long-range goal is to be capable of defending all theaters simultaneously.

In previous dialog you defined long-range as meaning 1990.

Is this still our military goal and our military strategy?

Secretary WEINBERGER. Senator, I am afraid it has to be. The key words are to meet the Soviet capability to do that kind of simultaneous deployment.

This is again what I had in mind when I say this is not a world of our choosing and these commitments we have to make are not those we would make in a vacuum.

What we have to recognize, I think, is that if we need a capable, credible deterrent, we have to be able to respond to Soviet threats.

If we are able to respond only to attack in one theater, it is absolutely certain in my mind that the Soviets will make an attack in two theaters, which they are perfectly capable of doing.

Senator NUNN. What is the long-range definition now?

Secretary WEINBERGER. I would still hope that although there was a setback, as you pointed out, last year, that if we can have the kind of authorizations that we have requested this year, and those we have indicated will be required next year, so that we can level out and by the end of this decade, we will be in a position to deter attack.

I would not want any misunderstanding, sir. I would not want you to feel that this is the kind of capability that we are trying to get that will enable us to launch attacks all over the world.

It is the kind of capability to respond to, in a credible way and thus to deter, a clear Soviet ability to attack in more than one theater at a time.

I would hope by the end of the decade we would be at that point.

Senator **Nunn**. General Vessey, do you agree we will be at that point by the end of this decade?

General **Vessey**. If the programs go through, I believe that we can deter Soviet attacks in all theaters.

Senator **Nunn**. I distinguish between the word "deter" and what this goal says.

Let me ask you this question. Do you believe that our goal of being able to meet the demands of a worldwide war concurrently in Europe, Asia, deployment in the Southwest Pacific and support of other areas can be met by this next decade?

General **Vessey**. A lot depends on what happens with our allies during that period.

As you know, our strategy is one very much tied to what our allies do. We will have to do things in turn in a war. We know that.

We will have to do that now and I suspect at the end of this decade we will have to do things in turn. There are certain things we will do concurrently.

Defeating the Soviet forces will require defeating them in one place, then in another place. We will have to defend in each of the places.

Senator **Nunn**. Should that not then be our goal as articulated in the posture statement rather than saying we are going to be able to defend all these theaters simultaneously?

You just described a goal I think is significantly different than what the posture statement has as a goal. I don't say this frivolously. Our people read posture statements. They drive defense budget strategy and everything.

Both you and the Secretary have significantly departed from this goal in a more realistic fashion, I might add, I think, this morning.

The Secretary has said our goal now is to deter. That is a totally different posture.

Secretary **Weinberger**. You can't really pick out a particular paragraph without having what went before and what went after.

There is not any statement or suggestion in any of the documents which indicate anything other than a need to acquire a deterrent capability.

When you have an opponent that is potentially able to attack and has airlift, sealift and bases and short lines of communication, potentially able to attack in a number of different places at once, if you are going to deter that, you have to develop a capability to defend.

This is not an offensive strategy.

Senator **Nunn**. I am not saying it is an offensive. That is clear. That is not the point at all.

If our long-range goal is to be able to defend all these areas simultaneously, then I think we ought to say so and recognize that.

If it is to deter in these areas and defend these areas, as General Vessey just described, in sequence as we had to do in World War II and every other war we have ever fought, I think we ought to say that.

There is enormous difference in the two goals.

Secretary **Weinberger**. I don't think there is any difference. Maybe it is because I am not making it clear.

I heard General Vessey say he might have to hold and defend in certain areas while you are doing your best to fight a very active campaign in others. That is what we did in World War II.

Senator NUNN. General Vessey, can we deter now today attacks in those areas?

General VESSEY. We are deterring.

Senator NUNN. What is the difference then in our 1990 goal and where we are now?

General VESSEY. Considerably greater comfort with our ability to do that.

Senator NUNN. A considerable margin of safety of deterrence; is that right?

General VESSEY. Not a considerable margin. I would say more comfortable margin of safety.

If you look at those charts that the Secretary had, we are not going to have a very comfortable margin of safety at any time in the foreseeable future.

Senator NUNN. General Vessey, may I ask this question?

Do you believe that we are closing the gap between our requirements as now defined and our capabilities?

General VESSEY. Yes, Senator, we are.

Senator NUNN. Do the Joint Chiefs' statements reflect that? Does your budget analysis?

As you recall, a year and a half ago you had an analysis showing a trillion dollar shortfall.

Does that mean you have changed that analysis?

General VESSEY. I read that article in the newspaper, but I didn't see that come out of the Joint Chiefs, Senator.

Senator NUNN. I saw it. It was a document.

General VESSEY. Not that came out of the Joint Chiefs.

Senator NUNN. We will go back and take a look at that.

Let me ask another question. You say on page 21 of the Joint Chiefs' statement and I quote:

> The strategic nuclear forces of the United States are currently capable of fulfilling the most important mission, that of deterring attack against the United States and our allies.

Is that correct?

General VESSEY. I believe that is correct.

INFERIOR STRATEGIC NUCLEAR FORCES

Senator NUNN. You heard the President and others describe our strategic nuclear forces as being inferior.

Is there any conflict between that statement and what you have just said?

General VESSEY. No, I don't think so.

Senator NUNN. So, they are inferior in your opinion also?

General VESSEY. We see that the Soviets have far more ballistic missile warheads than we have, Senator.

Senator NUNN. That is one measure. We have other compensating measures?

General VESSEY. We have other compensating measures. They are aging and they are aging every day and we need to continue with our modernization to maintain our deterrence.

Senator NUNN. Do you or do you not agree with the statement that the United States has strategic nuclear inferiority?

General **Vessey**. I think that is too complicated an issue to give short yes and no answers on, Senator.

Senator **Nunn**. You would not describe it that way, then?

General **Vessey**. I wouldn't describe it that way.

We are inferior in some respects. We are superior in other respects. It is important that we continue to modernize our forces so that we can continue to deter attacks on this country and our allies.

Secretary **Weinberger**. Deterrence, as you know, Senator, is what is in the mind of your opponents.

It is vital that they continue to have the correct perception and they have had that to date, of——

Senator **Nunn**. Is it better under those circumstances not to announce that we have strategic nuclear inferiority?

Secretary **Weinberger**. I have heard it many times.

The simple fact of the matter is we know what they have and they know what we have. There is no harm in such a hearing as this is. They are not only here, but they know about it anyway.

In our kind of open way they are the first in line to buy the budget and the budget has an enormous amount of data in it.

Senator **Nunn**. Are you hinting if we say it, they will be less likely to believe it?

Secretary **Weinberger**. They are more interested in what we do than what we say.

What is important is that we be correctly perceived which is what I started out to say, that is, that we be correctly perceived as regaining as quickly as we can and as effectively as we can the deterrent strength which to a considerable extent we abandoned for a lot of good reasons in the seventies.

When you do that, it costs a great deal more and you have to move a lot more rapidly than if we had kept pace in the normal modernization.

Senator **Nunn**. I don't disagree we have problems that need correcting, but General Vessey's statement says we already have that deterrent strength and we have maintained it.

That is what page 21 of the Joint Chiefs' statement says.

Secretary **Weinberger**. What I heard him say, and he is a better interpreter of what he said, is that we are at this point and, thank God, we are deterring attacks on us. It is vital we keep doing enough so that we can keep that happy condition still here with us.

It is a very difficult balance. You know as you lose the ability to hit their hardened targets, you lose the ability to achieve the accuracy they have, then you have to worry and then you have to do the things we are requesting now.

Senator **Nunn**. Thank you.

Chairman **Tower**. Senator Goldwater?

SOVIET MILITARY SPENDING

Senator **Goldwater**. Mr. Secretary, a Reuter's dispatch published in the Baltimore Sun a few days ago makes the statement that a new NATO report says that Soviet military spending has slowed markedly in the last 7 years and reveals that previous allied estimates exaggerated arms purchases by the Kremlin.

I might say that this follows to a considerable extent the CIA estimates of the Soviet economy.

I am wondering if you have come to any conclusions on this? Are they buying less because of the rather bad state of their economy?

Secretary WEINBERGER. Sir, I addressed that point in the opening.

While there is now a dispute in the intelligence community and the CIA does have a report that indicates that the spending they have done has been a little less than previously estimated, the fact is that I think we have to look at what they are getting for it.

What they are getting for it is a very substantial advantage over our production over the last 10 or 15 years. They have out-produced us in the ratios that I showed on the chart and they continue to do so. They are way above the amount we are asking in this year's budget or that we asked for in last year's budget.

The other thing I think we have to bear in mind, sir, is that for all their personnel, the Soviet's percentage of costs for personnel in their budget is 11 percent.

Ours is 43 percent, as I responded to you during the opening presentation. That says a lot about the difference between the two societies.

It says a lot about their ability to get more out of even a somewhat lower grade of increased spending than might previously have been thought by the intelligence community.

Senator GOLDWATER. They also claim that the Kremlin spends between 14 and 16 percent and we are spending nowhere near that level.

Secretary WEINBERGER. No; we are close to that.

OVERALL MILITARY STRATEGY

Senator GOLDWATER. General Vessey, about a year ago you and I discussed and I also requested of the President, and I think we discussed it with Secretary Weinberger, the need for an overall military strategy. This does not cover just the Middle East or Southwest Asia, but a general overall strategy.

Have you come up with such a strategy in the Joint Chiefs?

General VESSEY. Yes; we have, Senator, I believe that is reflected in the posture statement. There are two parts to this thing.

One is strategy for maintaining the peace as we are now attempting to do, and that is the strategy laid out in the posture statement.

The other part of it is the strategy for fighting a war if we fail to deter war.

We have both of those.

Senator GOLDWATER. This is no place to discuss that, but would it be possible for me to visit with you someday and get briefed on that?

General VESSEY. Yes, sir.

Senator GOLDWATER. I think it will have a significant influence on the attitude of the committee regarding the purchase of certain pieces of equipment.

Mr. Secretary, you did not display the total inventory. I think this is the first time that you have not displayed the total number of Warsaw Pact tanks versus the NATO tanks or Warsaw Pact tactical aircraft versus NATO.

Do you do that for a reason?

Secretary WEINBERGER. No, sir. We have a so-called Red-Blue briefing.

Senator GOLDWATER. You did not show it this morning.

Secretary WEINBERGER. No; it is partly classified. In general outline, the ratios are roughly the same as you would expect because those are the average annual figures of the Soviets for almost 20 years.

Just, for example, the tanks, the numbers are very, very high. The Warsaw Pact has close to 50,000 tanks. NATO forces have less than half of that.

These are pretty well consistent all the way. The ratios were designed to show the production lead they have had for many years compared to what we are simply asking for this year.

Senator GOLDWATER. Thank you. I thought that was the case.

Now, one more question relative to spares.

SPARE PARTS

I read several places in the last week or two that requests had been made by your office or through your office for what I call shop spares, the ability of the Air Force and the Army to manufacture their own spares.

There has been a request made to cut down on this practice. Is that true?

Secretary WEINBERGER. I haven't received any request to cut down on it. I am rather proud of the way in which the Air Force has begun manufacturing the kind of things they can in some of their repair shops and maintenance shops because it does save us a lot of money.

Ordinarily I would prefer to use the private sector wherever we could. If the Air Force can make the things they need at lower cost, and they are doing it in many cases, then ideology is not going to get in the way of stopping the lower cost.

It has been a very satisfactory result. The Air Force is the one doing most of this.

We have had no requests that I have received to stop it. My response would be based entirely on comparative cost. If it is less expensive for us to go out and get it on a bid basis, I want to do that.

If the Air Force in their own facilities, which I understand the people have already paid for and are very expensive, can manufacture for less, I would prefer to go that way.

It is a beginning effort and it grew out of the audits that we conducted that showed the problems we had with the spare parts that I mentioned in the opening.

Senator GOLDWATER. I hope you don't put a stop to it. I hope you don't try to slow it down.

Secretary WEINBERGER. No.

Senator GOLDWATER. I think they have been getting—I can't use the word—by the manufacturers in this matter of spares. I think it is high time that we begin to make our own nuts and bolts and landing gears and everything else because I know we can do it.

Every branch of the service has capable mechanics and capable machine shops. When the chips are down, they can provide the spares that we have been paying quite a healthy price for.

I would like to see those costs come down, too.

Secretary **Weinberger**. I totally agree with you. That is exactly what we are doing. I think you would be proud as I am of the quality of some of this work coming out of Air Force shops.

Senator **Goldwater**. Thank you, Mr. Chairman.

Chairman **Tower**. Senator Stennis?

Senator **Stennis**. Thank you, Mr. Chairman.

ALLIED DEFENSE CONTRIBUTIONS

I have a question on the contribution made by our allies. The facts I have here is that our NATO allies continue to have difficulty meeting their annual real growth of 3 percent for their defense establishment, and that the Japanese contribution for defense is still less than 1 percent of their gross national product.

Is that correct?

Secretary **Weinberger**. That is essentially right. It is not quite 1 percent. They have a basic policy of keeping under. This year they got to .998, but it is still under 1 percent.

Senator **Stennis**. I know you have dealt with this issue a long time in the Department of Defense.

This is something the American people don't understand at all, and they are getting impatient. What is the main problem?

Secretary **Weinberger**. It is a problem because one of the points we made is that we can't do this job all alone. We have to have support. That is why we spend a lot of time with our allies, with NATO meetings and with NATO conferences and conferences with our allies to try to insure that we are all doing as much as we possibly can.

In the case of Japan, they have had a situation in which last year and this year the only agency that had any increase was defense. This year the defense agency went up about 6.7 percent, 6.6 percent.

Unfortunately not in real terms. It will be an increase of about 4 percent in real terms. They did that only after a sharp internal fight with their Finance Ministry.

It does bring them, as you pointed out, to still a little less than 1 percent of their gross national product.

One thing should be pointed out and that is that in addition to that, they spend about $1 billion a year in direct support of the American Forces in Japan. I am not arguing whether they should or shouldn't, but it is in addition to the direct expenditures they make for their own self-defense.

It is what we feel is the most effective way. We keep urging them to do more and to remind them of the bad effect on American public opinion of doing less.

There are two or three ways you can do this. You can call press conferences and bang on the table and make a big speech or you can try in a quiet and, we hope, as effective a way as possible, I must say that the small but real increases that we have had in Japanese defense spending plus the amount they spend in support of our troops has been most welcome and very helpful.

With NATO again you are absolutely right. Some nations are doing quite a lot, some are doing about 3 percent, although there is nothing magical about the 3 percent figure.

The point is what they get for it. If they put it all in the payroll and not improving their strength, we try in all NATO meetings, and I go to 4 a year, to insure that the situation is recognized.

We publish a number of publications showing the nature of the threat. The Defense Ministers are pretty well united. They have some problem convincing their governments. In general, there have been major efforts made and major modernizations accomplished.

A large part of the central group would fall on our NATO allies. It is not an altruistic venture on our part. It will not do good if we cut away from Europe and endanger Europe more because I don't think we can live in a world with Europe overrun by Soviet troops.

Again, I think the actions in Congress have been very helpful in pointing out to our allies the vital nature of their continuing to make the maximum contribution they can.

I suppose the short answer is that defense spending is no more popular in Europe than it is at home.

Senator **Stennis**. You have done a lot of work on it anyway and I think you are more on the spot than usual. The American people are noticing these issues more.

As an old man as I am, when you passed that $300 billion mark for the budget for 1 year, you left me somewhat out there in the void. I don't know where yet.

Secretary **Weinberger**. It is nothing I enjoyed, Senator. I would rather come in with a third of it, but I have to be honest with you and with myself and tell you what I think is required.

Senator **Stennis**. You and John Tower can make up for a whole lot. We will talk some more about it later.

Secretary **Weinberger**. Thank you, Senator.

Chairman **Tower**. Senator Warner?

Senator **Warner**. Thank you, Mr. Chairman.

My first question is to General Vessey.

SITUATION IN LEBANON

Earlier today over breakfast I had the opportunity to visit with you and the Secretary, and we discussed the situation in Lebanon.

I expressed to you my support for the President's current policy and at the same time my concern, indeed the concern of many, indeed the whole of America, about the safety of our troops, both at sea and ashore in that region.

General Vessey, it seems to me that we have a dilemma on our hands here in the Congress. We have a responsibility to conduct a legitimate debate on this issue and at the same time I judge from your observations this morning that that debate focuses upon particularly the Marines ashore which enhances their being a target of opportunity by our adversaries.

My question to you would be: Would it not be in the interest of all concerned to as quickly and as expeditiously as possible reconcile whatever differences the Congress may have with the President and conclude that debate and thereby reducing, should we say, the target of opportunity of our adversaries against the Marines and perhaps the Navy afloat?

General **Vessey**. I would certainly agree with you, Senator. As you know from your trip in that part of the world, the people who want instability in that part of the world want us out of there.

If they think that shooting at our people will cause a rift in this country's support for the President's policies, they are certainly going to go ahead and shoot at our people.

So, I believe that it is important that those policies be resolved and that we support the President and his negotiator in getting on with peace in Lebanon and peace in the Middle East.

Senator **Warner**. The representation has been made, indeed the chairman and I have testified, that the credibility of the United States is very much affected by what we do with those Marines ashore and the manner in which a decision is made on what time to make the withdrawal that all of us hope will be as soon as possible.

Do you agree that their presence ashore very definitely impacts on the present long-range credibility of the United States to be an effective working partner, both diplomatically and militarily, in that region?

General **Vessey**. Certainly you found the same things I found. I found in my trips throughout that area that the nations that are interested in peace and stability and who are interested in supporting the United States in that area believe that their presence is very important.

It is a very important psychological presence for the Government of Lebanon to understand that there are nations in the world that support them and it is important to those other nations in the Middle East to understand that we are not going to back off on our commitment.

Senator **Warner**. One of the hopeful signs in that area is the progress being made by President Gemayel and others in constituting the Lebanese Armed Forces, the army itself.

There are presently five to six, I think we characterize them as brigades, that are operational. Their goal is perhaps as high as 10 brigades by June.

We, as I understand, are supplying as quickly as possible the needed equipment to reconstitute the Armed Forces of the Government of Lebanon.

Do you see that as a hopeful sign, namely that they in turn could eventually begin to take over some of the responsibilities of the multinational force, indeed our Marines at the airport, within a reasonable period of time?

General **Vessey**. Yes; Senator, I do. The Marines were sent in as part of that multinational force, not to solve all the political problems in the Middle East. That is beyond their ability.

They were sent in there to give a breathing spell to the Government of Lebanon so that they could build up their own capability, both to control their own territory and solve their political problems.

The army of the Government of Lebanon certainly won't solve all the problems alone. The problems are basically political problems.

The army is growing and it is a good army. It represents all the factions in the country. From what I have seen of it, it looks good and it will certainly be able to control its own territory fairly soon.

Senator **Warner**. In brief, then, the Joint Chiefs view this situation in a manner consistent with the President?

General **Vessey**. That is certainly correct.

Senator **Warner**. Mr. Secretary, Senator Nunn in his opening statement, I think made a pragmatic observation that in view of the deficit, the Congress will have to examine this budget with great care to determine if, in our wisdom, there are areas to obtain savings.

I direct your attention to the personnel account. Working with the Congress under the present administration, we have made great progress in improving pay and benefits, and thus the quality and retention of the people of the Armed Forces.

I would not want to see any diminution in that effort. Indeed, I think additional progress is necessary. That translates directly into readiness and other important aspects of our defense policy.

What concerns me, Mr. Secretary, is that last year you came forward and asked for 37,300 additional men and women in uniform.

GUARD AND RESERVE UNITS

The Congress responded by authorizing only 3,500. At that time it sent a rather strong signal that the Department of Defense should begin to look to the Guard and Reserve for the additional military capacity—particularly in the personnel area—that it needed.

This is predicated on a fairly sound factual basis that the Guard and Reserve cost but a fraction of regular forces; somewhere in the area of 25 to 33⅓ percent.

This year you have come up with nearly 30,000 additional men and women for the Armed Forces. It is interesting to note that the Department of the Army has asked for less than 1,000 within the 30,000 figure. Indeed, the Department of the Army seems to be recognizing the position of the Congress in shifting greater emphasis to its Guard and Reserve units.

Now, the Navy and the Air Force both have come in with very high figures.

Recognizing that we will look for areas in which to reduce this budget, I personally want a steady growth in defense and will support a steady growth figure, but along with my colleagues, I have the obligation to look at possible savings.

The question is: Can we not, looking at last year's actions of the Congress—namely, an increase in Guard and Reserve and reduction in your number—do the same thing this year just as effectively as we did last year and not allow 30,000 additional people which directly contributes to your 43 percent cost?

Indeed, 30,000 represents a quarter of a billion dollars of your present increase?

Secretary **Weinberger**. Senator, first of all, I agree with you that we should make greater use of the Guard and Reserve and we are doing that. I think it is important to do that because, as you say, they not only can provide very good service, but also it is important as part of the total force concept that they be there and ready and have as much training and with as modern equipment as possible.

All that is being done. As a matter of fact, I am delighted to report that the ready Reserves stands at a higher manning level than any time over the past 9 years, nearly 1.5 million reservists.

So, we are trying to do that as much as we can.

As you pointed out, the Army request for increase is less than 1,000, about 800. We will have within that a new Army light division with several thousand fewer people. It will utilize some existing nondivisional units.

With the Navy and Air Force we have the inescapable fact that we are increasing the basic strength of those two services.

With the Navy we will have 23 new ships this year. We can't man those only with reservists. As the force expands, the active element of the force has to expand, too.

The same is true of the Air Force. There are not only increases, but there are modernizations of the tactical force structure.

There are also improved communication systems and a number of other things that require more manpower in both of those services.

Within that constraint and as exemplified by the Army, we are trying to do exactly what you said and that is rely much more on Guard and Reserve and much more on active training as well as equipment for them so that they will be ready. It is by far the preferred way to go.

RESEARCH AND DEVELOPMENT

Senator Warner. Mr. Secretary, turning to another area of possible savings, and that is in the research and development account, this year RDT&E has a $7 billion increase. That is over a 20-percent increase from last year.

You alluded earlier to the Soviets having profited through the years by taking our technology.

My specific question is a correlary. What are the efforts being made by the United States to learn from the Soviets?

In Charlottesville, Va.—and I have been studying this for some time—we have an Army Center for Foreign Science and Technology. Let me show you one of their work products I brought with me. [Held up sample of material.]

LEARNING FROM SOVIET TECHNOLOGY

This is a radar absorption material built using specifications published in the open by the Soviet Union. I am told by Department of Defense officials in Charlottesville that similar technology is now being utilized in the United States in materials of a similar nature, and, speaking from unclassified documents, that certain portions of it are incorporated in our Stealth work.

This particular piece is just about as effective as the material that we are now making, but at one-fourth the cost.

The question is: To what extent are we utilizing this reverse technology and the extent to which the work being done at these very low levels—and I say that not in a disparaging manner, but they are way down the line from the Pentagon—to what extent is that feeding up and being made available?

Frankly, they tell me they are having difficulty getting their knowledge up to the working level in the Department.

Secretary Weinberger. I don't think they are having difficulty getting that knowledge up. If they are, we certainly want to unclog that channel.

As you point out, it is very vital that we know from every point of view of our ultimate defense against this kind of equipment as well as the ability to duplicate or replicate it, so I don't think there is any difficulty getting up the line.

The difficulty is in acquiring the equipment to do the reverse engineering on it. That does take some special talents and some time. We have those efforts going on.

I obviously in this hearing cannot go into detail on the specifics, but the one you mentioned in Virginia as well as others are areas where we attempt to learn all we can from the Soviet technology.

Much of it is very good. Certainly it is important to us not only to see if we can do reverse engineering, but also to see ways in which we can defend against it.

That is certainly a continuing process, true of such things as artillery and tanks and all manners of heavy equipment as well as their more advanced technology.

Senator **Warner**. Mr. Secretary, my time is up.

You can't be expected to know everything, but I assure you, based on my limited inquiry, the people performing this work have concern that their work product is not being fully used within the Department.

I would just like to work with you to see what we can do, as you say, to unclog the pipelines of information.

Secretary **Weinberger**. If you want to arrange for them to meet me and give some demonstrations in my office, I would be absolutely delighted.

Senator **Warner**. We will do that.

Thank you.

Chairman **Tower**. Senator Exon?

Senator **Exon**. Thank you, Mr. Chairman.

Let me add to you, Mr. Secretary, and you, General, our thanks for your excellent presentations today.

ROLE IN LEBANON

Let us return to Lebanon for just a moment if we might.

General Vessey, let me ask you a question since I listened with great interest to your response to the questions in this regard by the Senator from Virginia.

Certainly you would agree that the role of the Marines has changed dramatically in the last year. Certainly I would think that all would agree that what they went in there for in the first place, they have not been able to do. Essentially, they are taking fire now without providing any action with regard to bringing peace.

I don't know whether you agree with that or not, but at least that is my feeling.

In that regard, let me ask, do you not think or do you think we would be breaking a commitment if we would merely move those marines to ships of the fleet offshore. In your military opinion, would they not be just as effective there as they are in deep underground bunkers near the airport?

General **Vessey**. They certainly would not be providing some of the security for the airport that they now provide if they went aboard ships.

As Senator Warner pointed out, the commitment is a psychological commitment of the United States to peace and security in that part of the world.

As you know, militarily, other than providing some of the security for the airfield and hence to the other elements of the multinational force, we went in there as part of a force of three nations and a fourth nation was added later.

Militarily they are not doing a great deal other than protecting themselves and providing their presence, showing that the United States does support peace and security in that part of the world.

They didn't go in there to fight, as you say.

Senator Exon. You said in your testimony that you thought the Gemayel army forces were coming along very well and that they might be able to be strong enough to secure the area.

I don't know what you meant by that. How soon could this happen? Is this a month away? Is it a year away?

General Vessey. It is very difficult for me to answer that question, Senator, because what is needed more than anything else is political movement in solving the problems of Lebanon.

The Government of Lebanon can't shoot its way into power and has no intention of trying to shoot its way into power so far as I know, but it needs to have political accommodation with the factions inside Lebanon, with its neighbors, Syria and Israel.

Senator Exon. I take it when you said earlier that the Gemayel army forces may be strong enough to secure that area, you meant they might not be able to secure it militarily unless there was also a political accommodation?

General Vessey. Both of those are necessary, Senator.

Senator Exon. Let me ask this question then. From your knowledge of the training and buildup of the Gemayel forces—and we have been doing a lot in that area—if they are so strong and getting stronger all the time, could they not at least hunker down in the foxholes that our marines are now in and provide the same security as we are now and then allow us to move—not abandon the whole area—but move to the fleet offshore?

General Vessey. They could do that, but they would have to abandon other things that they are now doing.

Senator Exon. You mean they don't have 1,600 or 1,800 men that they could put in those underground barriers?

General Vessey. The trained formations they have are now performing security missions somewhere in Lebanon. They are training more formations to take on additional jobs.

If they were to do it today, they would have to take people away from those other jobs in order to to pick up the positions of the marines.

Senator Exon. Thank you, General.

OPERATIONS IN HONDURAS

Mr. Secretary, how much money is in the budget for the current operations in Honduras and are most of those costs behind us or are there substantial costs in the 1985 budget for the continuation of the operations in Honduras. Is it true, as we hear speculated in the press today, that we are planning to keep 1,000 troops in Honduras for an indefinite period?

Secretary Weinberger. Senator, I would have to get the precise amount for the current year. Essentially it is part of the exercise budget, the maneuver budget, that is allocated by the Joint Chiefs.

We can get the exact amount to date. The activities in Honduras, our maneuvers, our exercises, do consist of the construction of runway strips for landings.

[The information follows:]

HONDURAS

Secretary WEINBERGER. We estimate that in FY 1984 our operation and maintenance (O&M) costs for Honduran operations will be $100.1 million. Of this amount joint exercises are estimated at $71.1 million. The remaining $29.0 million is for Army post exercise activities, intelligence activities and radar operations. These cost estimates are for the full (not incremental) cost of activities funded by the operations and maintenance appropriation. Our FY 1984 military construction program for Honduras is $8.0 million.

Of the FY 1984 O&M estimate we have spent about $54 million as of the completion of the Big Pine II exercise in February. For military construction, the $8.0 million provided for airfield improvements at Goloson is on hold pending DoD notification to Congress of the overall construction plan for the region.

At this point our specific plans for Honduras for FY 1985 for other than military construction have not been finalized. We have tentatively identified $27.9 million for joint exercises in the area of responsibility of the USCINCSOUTH which includes both Central and South America. Most of these funds will be for exercises in Central America. Some of the other operational activities in Honduras are also likely to continue in FY 1985, but specific plans and funding requirements for these activities have not been finalized. The FY 1985 military construction budget includes three projects for operations in Honduras. These are relocatable buildings for a 100 man intelligence contingent ($4.3 million) and a forward munitions storage facility ($1.5 million) at Palmerola and a facility for storage of POL, outsized barrier materials, and bridge stocks ($2.9 million) at San Lorenzo.

I want to stress that the O&M amounts are tentative. The detailed operation plans of the joint exercises have not been completed. Further, funding requirements for these exercises and the other operational activities will depend on the circumstances as they exist at the time.

Insofar as our troop plans are concerned, we currently expect a maximum troop strength through April 1984 of about 1,700 except for periods when small U.S. units (less than 700) are in-country to participate in exercises of short duration. After April the peak strength will be reduced to about 850 thru June; this does not include Granadero I exercise personnel. Plans for FY 1985 have not been finalized.

They consist of the installation of a very fine station hospital which I have seen that has, during the period that has been there as part of its training for that kind of activity, extended a substantial amount of public health benefits to the population.

There have been more docking and some other facilities that have been constructed for the purpose of the maneuver. These, of course, remain. You don't pick these up and take them with you.

There is a plan for continued maneuvers in the next year exactly as in the exercise budget, the plans for another maneuver in Korea and another maneuver for the deployment of troops to the——

Senator EXON. I am asking about Honduras.

Secretary WEINBERGER. Yes; there are plans for that, too.

As far as the permanent presence is concerned, I don't mean it runs quite a thousand, but if you maneuver 2 or 3 years in a row in a particular country, there is a considerable advantage to leaving very heavy equipment there rather than hauling it out and taking it back each year.

There will be some men in that category taking care of that kind of equipment. There will be some communications maintained because again putting it in and taking it out and putting it back in again is a very expensive business.

There will also be some public health activities continued with the medical personnel. I don't believe that totals quite 1,000, but there will be somewhere in the range of 700 or 800.

General Vessey may have the exact number. But there are plans to do another exercise in that area next year if Honduras is still willing, of course.

So, that accounts for the amounts that have been spent, the amounts that will be spent and for the continuing activities during the period when we are not conducting exercises.

Senator Exon. Then it would be fair to say that a decision has been made at least on a tentative basis for new exercises of a military nature in Honduras next year?

Secretary Weinberger. Yes, I think that is entirely fair to say.

This also involved—I did not mention it in my previous answer—continuation of the training.

Senator Exon. How about the year after that?

Secretary Weinberger. That I don't know, sir. All of this is contingent on Honduras continuing to extend the invitation which they did this year.

Senator Exon. They are highly likely to do that, are they not?

Secretary Weinberger. I don't know whether they will or not. Things that I regard as certainties in this world frequently don't turn out that way.

Senator Exon. We all have that problem, Mr. Secretary.

Another question. Certainly I think you know that the budget that you propose—and I take it on face value—is your bottom line recommendation for what we need and I compliment you for the presentation you made.

In the real world in which you operate, then, you discharge your duties and you discharge them well. We have our responsibilities.

CUTTING THE MILITARY BUDGET REQUEST

There is no question but what this budget is going to be cut from what you have recommended, in my opinion, as a member of this committee and as a member of the Budget Committee.

We had a great deal of difficulty last year; in fact, I don't think we had any cooperation from the Department of Defense in giving those of us who have to make these decisions and recommend decisions to our colleagues what prioritizing you might give us for cuts that we have to make.

Are we going to get a deaf ear from you in the Department of Defense this year as we did last year or will you be more forthcoming by saying if you have to make some reductions here, "Here is where we recommend that the cuts be made as much as we are against it."

Secretary Weinberger. I can't see how I could be more forthcoming this year than I was last, Senator.

If we have to come to that bridge, we will fall off it when we get to it.

The point is that there are a large number of unmet needs. There was a long period of time that we did not do what we should have done and we are trying to make up for it as quickly as possible.

Last year—I don't like to argue with you, but we did submit at a later time in the session a lower amount than was initially requested. We were asked before the budget came up, to recommend cuts in it.

We spent 1 year in developing it and making reductions. We thought it was a pretty good budget.

The budget is not formally released yet for another 5 minutes. It is premature to start cutting now.

Senator EXON. If I can hold the floor for another 5 minutes, can you give me some priorities?

Secretary WEINBERGER. I would prefer to wait a few more minutes beyond that.

Senator EXON. My time is up.

Thank you, Mr. Secretary.

Chairman TOWER. Senator Humphrey?

Senator HUMPHREY. Thank you, Mr. Chairman.

Mr. Secretary and General Vessey, welcome.

STRATEGIC WEAPONRY AND ARMS CONTROL

I want to turn now to strategic weaponry and arms control. I will start off by saying that I regard the absence of the Soviets at the bargaining table in Geneva as a great tragedy. Not only that, but an act of gross cynicism and irresponsibility on their part.

I think we have a good proposal before them in the form of the builddown proposal which Senator Cohen, my neighbor from Maine, originated. I think that is an excellent proposal.

Inasmuch as they are absent, let me focus on our side of things.

On page 133 of the Secretary's annual report to the Congress there are some charts which I wish most Americans or all Americans could see. There are two charts which show the trend in the stockpile of our nuclear weapons.

By nuclear weapons, I mean those things that actually blow up. I am not talking about bombers or missiles or submarines, but rather the nuclear devices they carry.

These charts show that there has been a very substantial reduction in our nuclear stockpile, both in terms of the individual numbers of those weapons and in their total megatonnage.

Is that not correct?

Secretary WEINBERGER. That is correct.

NUCLEAR DEVICES

Senator HUMPHREY. In terms of individual nuclear devices, things which actually explode, we peaked out around 1967 and today stand at about one-third below the peak in terms of such individual weapons and that in megatonnage if we add up the total explosive power of those individual weapons, our arsenal peaked in 1960 and today stands at 25 percent of where it stood then.

That is pretty dramatic. That is obviously a reduction and not a buildup.

Having said all of that, I must say as one Senator, I am concerned that if in fact all the programs are funded that are sought, we are going to see a reversal in those lines or at least in the lines showing individual weapons such that it will begin to climb again.

Am I correct in that understanding?

Secretary WEINBERGER. As you know, at a NATO meeting in Canada, we agreed on taking out 1,400 more nuclear warheads.

In the builddown proposal, we would have hopes that if we could secure a verifiable agreement to make sharp reductions down to a much lower level, they would not have to climb.

We obviously have increases proposed as we acquire the MX missile and as we acquire the Trident D–5. There will also be retirements of older systems such as Titans.

If we could get it lower through negotiation, then obviously that is the desirable way to do it.

Senator HUMPHREY. You are saying absent control negotiations and agreement between the parties, there will be a net increase?

Secretary WEINBERGER. There should be a net increase in the next couple of years, but as the retirements take effect with the systems being replaced, it will not be a large increase.

Senator HUMPHREY. Let me say that the marginal increases is costing the administration a great deal of public support. If we could just tell the American people, look, our stockpile has been declining and it is not going to go back up, I think that would aid enormously in bringing the American people and public opinion around to our cause.

I would like to suggest to the administration even in advance of any kind of arms agreement that it commit itself to no increase in the number of nuclear devices in our arsenal, that we would in fact be freezing, if you will, our nuclear arsenal in numbers, but this would differ from the popular freeze proposal in that we would still be able to modernize both those devices and, importantly, the vehicles also which deliver them.

There is so much confusion in this country about what constitutes a nuclear weapon. If you want to build a bomber, somehow people see that as a nuclear weapon. It becomes that much more difficult to modernize delivery vehicles.

I am simply saying that it would be so much easier for the American people to understand and support the President's policies if we could freeze, cap the number of nuclear devices in our arsenal while still pursuing the essential and all important modernization which you are doing so admirably.

Secretary WEINBERGER. It is a worthy goal and we would want to work in every way we could to realize it.

The problem is mainly one of what you might call the logistical log. As you bring on line one new system, you can't immediately retire an older system. For example, right now we could not dismantle the number of Minuteman missiles that would equal the number of MXs we hope to get in 1990, something of that kind, because you have too big a time gap.

As these programs we are putting before you are completed and great progress is being made on them, it might be possible to keep relatively equal or relatively lower total numbers.

We are perfectly willing to try to explore that with you.

General Vessey may have a point he wants to make on the military problems involved in any kind of too rigid application. That is the real problem with the freeze that others are talking about.

It does not allow any modernization. It is absolutely rigid.

Senator HUMPHREY. I quite agree. I understand there might be some be some day-to-day problems in keeping it below the cap, but as a commitment to a policy, I think that would have an enormously good effect in helping the American people to understand and be supportive of what the President is trying to do.

I am supportive, myself.

Secretary WEINBERGER. Thank you.

Chairman Tower. Senator Levin?

Senator Levin. Thank you, Mr. Chairman.

Mr. Secretary, General Vessey. Again, Mr. Secretary, you come to Congress asking for a large increase in the defense budget.

It seems that the more things change out there, the more your approach stays the same.

The President says now that we have restored deterrence. The CIA says that it overestimated the amount of Soviet defense spending.

The deficits are skyrocketing.

Nonetheless, your approach stays the same which is an ever spiraling up defense budget.

This defense budget calls for a 13-percent increase after inflation. It is above and beyond our legitimate military needs.

WRONG DEFENSE PRIORITIES

It also represents the wrong defense priorities. Too much for nuclear weapon systems and not enough for needed conventional weapon systems.

It also is being sold to Congress again with one-sided charts, contradictory statements, misleading and exaggerated rhetoric.

Not only are the deficits in the President's budget extremely dangerous, they are time bombs ticking away there, but there are severely misplaced spending priorities in this budget.

At the same time the administration is asking us for $33 billion more for defense, it is cutting, actually cutting dollars for summer youth employment, employment for older Americans, for the job corps, for displaced workers' programs, and on and on.

I think the DOD has a real credibility gap, Mr. Secretary.

In his peaceful intentions speech on January 16 the President claimed that "America's deterrence is more credible and it is making the world a safe place and our restored deterrence has made the world safe."

Later in an interview with the Washington Post he elaborated that our increased safety was due to an improved nuclear deterrent capability and that the Soviets recognize we have a deterrent capacity we didn't have 3 years ago.

That is the rhetoric, we have a nuclear deterrent capacity we didn't have 3 years ago.

The reality is that the only nuclear deterrent capacity that we have now that we didn't have 3 years ago was the Trident submarine and the air-launched cruise missiles and they were funded before this administration took office.

The reality is that this administration has actually reduced our excisting nuclear deterrence forces by unwisely dismantling our Titan II missiles and B-52 bombers.

In that same speech the President referred to defense spending and weapon production gaps between ourselves and the Soviets that the administration is so fond of using to justify its bloated defense budgets.

He said:

> Over the last 10 years the Soviets devoted twice as much of their GNP to military expenditures as the United States, produced six times as many ICBM's, four times as many tanks, twice as many combat aircraft.

Secretary Weinberger, today you repeated this litany in your statement and in your charts before us. That is the rhetoric.

The reality is that the United States added more strategic nuclear warheads to its arsenal during the supposed decade of neglect in the seventies than did the Soviets.

The reality is that the CIA now estimates that the annual rate of real growth in Soviet defense spending between 1976 and 1981 was 2 percent per year.

The average rate of growth in defense spending from 1976 to 1981, according to the CIA, was 2 percent per year.

Ours averaged 3 percent per year and that excludes your supplemental in fiscal year 1981. That is before you folks came to office.

The facts also are that we averaged in those 6 years before you came to office real growth in the defense budget, again more than the real growth in the Soviet defense budget and the facts are that we and our NATO allies have always outspent the Soviet Union and their Warsaw Pact allies on defense.

TANK PRODUCTION

I want to spend one moment on tank production. I think it deserves some special mention because you are quick to point out in chart 1 that the Soviets produce an average of 2,300 tanks each year, that you are only requesting 720 M–1's in fiscal year 1985.

If anyone is to blame for the tank production gap, it is this administration which twice before now has said it would be producing over 1,000 tanks a year by 1984, but have requested far fewer.

May I say that the same administration has unsuccessfully fought our attempts year in and year out to add money to the tank purchase.

I think it is typical of the defense rhetoric of this administration and the credibility gap that exists here. You want to have it both ways.

You are saying, "Look at the tank production gap, we should spend more money on defense."

But then you cut the tank production each year below the rate Congress appropriated the year before.

Mr. Secretary, you have also claimed credit for the procurement reforms and management reforms. Yet in many cases the initiatives of reforms claimed actually were begun by Congress and fought by this administration.

Increased competition in defense procurement is claimed. Yet the administration fought the proposal by myself and Senator Cohen for years to promote open bidding, competitive bidding.

You take credit for the Inspector General's office uncovering spare parts pricing horror stories. Yet we created that independent office over your objection.

You fought the Congress creating an independent DOD Inspector General. Just last week the new deputy Secretary of Defense—I assume he will be confirmed and I hope he will—refused to agree to aggressively implement a couple of amendments which I was able to get into the law of this country and to limit spare parts price increases and to increase competition.

Finally, in the area of fiscal responsibility you claim that you are exhibiting that kind of fiscal responsibility because you have only added $12 billion, you say, in outlays above President Carter's defense program in the 5-year budget.

I don't know how we can reverse a decade of neglect, as you always put it, with $12 billion above Carter unless there wasn't much neglect.

When it comes to showing fiscal responsibility, you say we are only $12 billion above Carter. You are trying to show us how fiscally responsible you are.

At the same time you talk about a decade of neglect, constantly a decade of neglect, when it comes to your other political objectives.

I hope, Mr. Secretary, that as much as we disagree on the emphasis on nuclear weapons, I think there has been too much, your thinking there has not been enough emphasis and you want more all the time, and I still believe we are throwing away billions on noncompetitive procurement.

I don't think you agree with that assessment.

NEED FOR CONVENTIONAL STRENGTH

I do think, however, one thing we can agree on is that we do need more conventional strength. In that area I am happy to agree with you and hope to work with you again to increase the conventional portion of the defense budget just as I was able to increase that budget by almost a half billion dollars on the floor of the Senate last year.

Maybe we also can agree on a few statistics.

Would you agree, Mr. Secretary, with my statement that the CIA now states that the Soviet Union increased their defense budget by 2 percent real growth during those 5 years or 6 years before you came to office and that our average increase in that 6-year period before you folks came to office was 3 percent real growth?

Can we agree on that statistic for starters?

Secretary WEINBERGER. No, sir. In fact, I disagree absolutely with everything you said.

Senator LEVIN. Even for additional conventional capability?

Secretary WEINBERGER. Well, the additional conventional capability has been increased at our strong urging and I am glad you joined in that effort.

Let me go back to the CIA thing which is causing a certain amount of confusion and that confusion is being added to by the statements that are made.

What the CIA is talking about is the estimate of the expenditures that they find that the Soviets have been making measured by a complex formula as to whether those particular systems could be manufactured in this country for somewhat similar amounts and how much that has increased.

There is a big academic dispute in the intelligence community whether it is 2 percent or 3 or 4. I think it is quite interesting, but totally irrelevant.

The important thing is the output figures. That is another area where I have disagreement with you with respect to the output that comes from that spending.

The other thing is that it is incredibly naive to measure Soviet spending on defense by looking at the defense budget. They have held it at 7 billion rubles for 3 years.

There are a few other pockets you have looked at. When you look at those, mostly the spending is not a relevant factor. The relevant factor is what comes out.

Before you got here, I mentioned their personnel costs are 11 percent compared to our 43 percent. Whatever they spend, they are able to get a great deal more hardware, more fire power and more military strength and that is another thing we have to take into consideration.

I don't know how much time I have, Mr. Chairman, but there is a very large amount of material here to disagree with. Maybe I should play it in reverse and furnish for the record something we would like to put in as opposed to something that the committee requests in response to all these statements which I find to be, as I say, totally wrong.

Chairman **Tower**. We will be glad to receive anything you want to submit for the record, Mr. Secretary, and it will be incorporated in the record.

[See statement of Secretary Weinberger to the committee, May 3, 1984.]

Chairman **Tower**. Senator Levin, I am sorry, but your time has expired.

Senator **Levin**. Thank you, Mr. Chairman.

Chairman **Tower**. Senator Cohen?

Senator **Cohen**. Thank you, Mr. Chairman.

Mr. Secretary, Senator Levin indicated that the administration has a credibility gap. I want to explore where we have a treaty gap.

TREATY GAP

I was intrigued with your statement that in your judgment it was a tragic mistake to have adopted the ABM treaty.

Was I mistaken in that impression?

Secretary **Weinberger**. I am sorry?

Senator **Cohen**. I believe you indicated you felt it was a tragic mistake to have adopted an ABM treaty?

Secretary **Weinberger**. No, I said it was a tragic mistake to take the view that both sides were perfectly safe if neither had any kind of credible deterrent and then not pay attention to the fact that the Soviets were paying no attention to that at all. Instead they were going ahead and developing a very strong defense starting with every kind of aspect of that you can consider, including civil defense, including defense of the continuity of their government, including defenses that are illegal under that treaty such as the large phased array radar and building up a very strong defense at the same time they are increasing their offensive strategic forces way beyond anything we did in the decade of the neglect of the seventies.

That was the tragic mistake.

Senator **Cohen**. The problem was not conceptually with the treaty in terms of looking on the ABM system as destabilizing?

Secretary **Weinberger**. If this was a perfect world and the other side did what they promised to do, which they have not done, then you might say if both sides, in a totally verifiable way, concentrated on giving up all strategic weapons or concentrated on giving up defensive systems, there might be some justification for it.

But to rely on that theoretical concept and pay no attention to what the Soviets are doing is a tragic mistake.

Senator COHEN. Let us go back to the question of whether or not, living in an imperfect world, the treaty per se—in terms of the objective—was a desirable one at the time and remains one today?

Secretary WEINBERGER. I don't happen to think so because you have to apply the history of the Soviet Union to the actual work.

Senator COHEN. I read from section 5:

> Each party undertakes not to develop, test or deploy ABM systems or components which are sea-based, air-based or mobile land-based.

At different pages throughout the report to the Congress there seems to be a slight ambiguity in terms of the terms that are used.

For example, it is referred to as a research and development program on page 185, paragraph 6, of the report, a program requiring major research and development efforts in a number of areas.

Then later it states that since the program is a research and technology effort, it can be fully pursued for the next several years within existing treaty constraints.

The questions I have are: Are we pursuing a research and development program, and is a technology effort equivalent to a development program?

Secretary WEINBERGER. What we are pursuing, Senator, first of all, is the attempt—which I insist is a very noble one—to try to eliminate these weapons from the world by rendering them totally impotent.

We are doing it initially, as we have to do, by research. We are examining a number of different kinds of systems, a number of different kinds of possibilities that would in effect catch the Soviet missiles as they emerge from their silos; if they are missed there, in mid flight; and if missed there, in terminal phase, and do this by nonnuclear methods.

We are certainly not ready to deploy anything. We are not ready at this point to develop anything, but we have to do research. There is a large amount of money in the request before you for research.

I think it is a vital thing to pursue.

The other half of it is that the Soviets are doing it, have been doing it vigorously since 1967.

If we don't do it, we will find ourselves behind in a most dangerous way.

Senator COHEN. I think it is important to raise this issue because, in connection with your statement, you indicate "effective verification measures are essential to any arms control agreement"—I agree with that—"as we have now discovered, they are not sufficient to make arms control succeed."

The question then becomes, what is necessary to make them succeed?

I suspect the answer is to demonstrate a capacity to build competing or comparable systems. That is one option, to go forward, for example, with an effective ABM system.

Is it a better option to pursue, as you suggested to Senator Humphrey, I thought, that a treaty, an enforceable, verifiable treaty, is a better way to go?

Do we seek to enforce existing law against the Soviets when we believe they have violated the law or do we demonstrate to them that we can compete on an equal basis in an arms race?

Secretary WEINBERGER. We don't have any tribunal for enforcing the law. We don't have any opportunity to secure any kind of verifiable, equitable agreement that actually reduces arms and reduces the danger unless we can enter those negotiations from a position of strength because the Soviets are very realistic people and they are not going to see any need whatever to make any concessions unless they have something to gain.

If they have something to gain by securing an equal reductions from us that brings us both down to equality, they may negotiate.

I would much rather get a negotiated agreement. But with the responsibilities that I have, I can't come in and tell you that we can sit down at the table from a position of inferiority in certain categories and expect that we are going to be able to come out with a verifiable agreement that reduces the danger and the risk to us.

We might do that if we can enter it in good strength. You have seen the difficulty of negotiation this past year. I don't see that is any reason for not continuing to try.

If we do that without putting any kind of reliance into the need to maintain a deterrent capability and possibly to develop an effective strategic defense, then I don't think that you are fulfilling your responsibility and I think you are endangering the country.

ANTISATELLITE WARHEAD TESTING

Senator COHEN. Last year an amendment to the defense authorization bill was passed by a fairly wide margin in the Senate which directed that no funds be spent to test any antisatellite warheads against objects in space unless the President certified to the Congress two things:

That the United States is endeavoring in good faith to negotiate a mutual, verifiable ban on ASAT weapons with the Soviet Union; and

Two, pending such an agreement, testing is necessary to avert clear irrevocable harm to the national security.

I don't believe that certification is required at this point in time, but I am questioning why there has been such delay in seeking negotiations?

Is it because we are continuing to test missiles against a point in space until such time as we are satisfied we have a capability, and then seeking to negotiate. Should we not be seeking to negotiate now with them and see if we can't avoid that kind of expenditure?

Secretary WEINBERGER. I don't know that I can speak for everybody because this is not my specific area, but I do know if we attempt to negotiate right now any kind of freeze, for example, or if we came out of a negotiation with any kind of freeze on ASAT weapons, we would be way behind what we need.

The Soviets have a system. We have to try our best by testing, as we did, which is within the guidelines of the Congress and try to produce an effective system.

I think at that point we would be far better able to negotiate the kind of treaty that would protect us and which I could have confidence in recommending to you and would safeguard the national interest.

Senator **Cohen**. The issue, for me at least, is that the Congress is on record as prohibiting the testing of these systems at an object in space.

NEED FOR NEGOTIATION

What we are doing is testing against an imaginary point in space. The requirement of Congress is to negotiate in good faith, to at least sit down and talk to them about it.

It does not say freeze. It says sit down and talk about the possibility of putting limits on it.

I am wondering why there is no effort to sit down. I know there are troubles negotiating with the Soviets, but in every other negotiation, including INF, we have always set up a working group to see if we can deal with the verification problem.

Secretary **Weinberger**. I think probably the people who have been doing this sort of thing have been discouraged by the experience last year in which the Soviets walked out of two negotiations and have refused to make any kind of serious effort while they were there to negotiate. ASAT also involves some very difficult problems, including that of verification.

If you could get that sort of agreement and it is thoroughly verifiable and involves their reducing the capability they have now or out developing one that was equal, then we would have a different kind of picture.

Senator **Cohen**. General Vessey, you praised the quality of the men and women who are serving today in the Armed Forces. Reference has been made to manpower consistently throughout this hearing today.

WOMEN IN THE SERVICE

What has happened to womanpower with respect to the women in the service?

There seems to be a deemphasis on the recruitment of women according to the ads I have been watching. They are effective and very well done, but they seem primarily directed toward men and not toward women in terms of having exciting and valuable educational opportunities in the military service.

General **Vessey**. I don't know that that is the case, Senator. I would have to get you a little information for the record on that.

[The information follows:]

Joint Recruitment Advertising Program

The current Joint Recruitment Advertising Program (JRAP) campaign includes four TV commercials, all but one of which present women in the military services. One in particular, "Serve your Country," prominently features women in the military.

When the JRAP purchases advertising time on a given program, generally all four commercials will be shown. Three of these commercials depict women in the military. When only two commercials are shown, one prominently features women in the military. When spot purchases are made (only one commercial in a program), the commercial featuring women in the military is shown 50 percent of the time.

Since the advertising script is generic and non-sexist, there is no attempt to emphasize either men or women. The visual presentations in the commercials emphasize women in the military in one commercial and represent women in two others.

DOD clearly recognizes the contribution women have made and continue to make to the Armed Forces. Accordingly, the fiscal year 1985 JRAP advertising campaign will continue to provide the necessary emphasis on women in the military.

As an aside, the Army is the only service currently purchasing time for network TV commercial broadcasts. Its commercials provide just representation to women in the Army. Further, many of the Army commercials focus more specifically on valuable educational opportunities.

I just want to say that the women we have in the Armed Forces are doing remarkably well. I have some topnotch women working for me on the Joint Staff. They are doing remarkable things almost every place in the Armed Forces.

STATUS OF ASAT PROGRAM

Senator COHEN. For the record, could you give me a status report of the request delivered to Congress, what the status is of the ASAT program?

Secretary WEINBERGER. Yes; we will have a report in by the 30th.

I would certainly endorse what General Vessey said about the women in the Armed Forces. From the service academies all the way through in the enlisted ranks, they are doing a superb job and they are coming in in substantial numbers.

Chairman TOWER. Senator Kennedy?

Senator KENNEDY. Thank you very much, Mr. Chairman.

Mr. Secretary, I share the belief that the President's decision to seek the $305 billion in spending authority for the Defense Department in fiscal year 1985 is astounding and basically irresponsible.

INCREASED DEFENSE SPENDING OPPOSED

The Pesident's request is astounding because the Congress made it very clear last year that it would not go along with massive increases in the defense spending.

When we dealt with the matter last year, Congress concluded that the defense spending should be kept on a steady and realistic path, a moderate predictable growth averaging approximately 5 percent. The administration has apparently chosen to ignore the Congress.

I believe the request is also irresponsible. I certainly will support and I believe the American people will pay for whatever is necessary to defend the Nation and our allies, but there is no evidence to suggest and there is certainly no evidence to be found in your statement that we must spend $48 billion on defense this year in addition to what was spent last year to be sure that we are in fact safe and secure.

Your own request was actually for a $65 billion increase over last year. OMB reduced this amount to the $48 billion that you have requested. This is in face of studies that have been referred to previously by the Central Intelligence Agency, reported to this committee by NATO, and published by the Joint Economic Committee, which find a completely contrary growth pattern, in terms of procurement by the Soviet Union.

What really worries me, Mr. Secretary, is not only this, what I consider to be a responsible request of the Congress at the present time, but what we might expect from this President and this administration should they have a second 4-year term.

What we are faced with as we begin these hearings is the enormous task of reducing in some rational way this bloated budget of some

$16 billion just to bring it in line with the current budget resolution. Even with this reduction, the American people ought to understand that it will still include a $30 billion increase at a time when everything else will be frozen, or cut. Surely this is more than ample to meet our security needs.

Quite frankly, Mr. Secretary, I reject and find somewhat offensive these constant appeals to the national pride, that those who support this particular budget are somehow patriotic and those who question it are somewhat not so.

It may be good politics to make that particular appeal, but I believe it is fundamentally poor defense policy.

What is needed is a steady and predictable defense budget to allow the military to set priorities and make the most of our defense dollars.

Money does not necessarily buy more security. The American people are the losers when the President plays politics with our national defense.

What I would like to ask you specifically is to follow up on a question of Senator Exon.

CONFORMING TO BUDGET RESOLUTION

If it is the judgment of this committee to make the budget request, authorization consistent with the budget resolution, and to make the cuts, will you come back here to this committee and indicate to this committee what is in the best national security interest for this particular country?

Secretary **WEINBERGER**. I would like to respond to a few of the comments you make, Senator.

Senator **KENNEDY**. Will you answer my question first because we do have a time limit.

Will you come back up and give us the benefit of your judgment about which programs conform to the budget resolution?

Can you answer that first?

Secretary **WEINBERGER**. Bear in mind that the Congress did not conform to the budget resolution last year. The budget resolution was cut by the Congress as far as our defense appropriation was concerned by a little over 2 percent.

That we find extremely disquieting, and it is one of the real reasons why we have to ask for substantially more this year.

Senator **KENNEDY**. I point out, Mr. Secretary, since you are not going to respond precisely to my request, we also have the statement of the President of the United States which he gave to the American people that today we are safe, we are secure, we are strong.

We have the reports of the CIA, NATO, JEC, about what our principal adversaries are spending.

You, yourself, have made the request for over $65 billion in terms of our defense spending. If we attempt to conform and it is the judgment of the Congress to reduce this spending, will you help the Congress of the United States in prioritizing?

Just yes or no. Will you do so?

Secretary **WEINBERGER**. I don't answer yes or no to questions like that, but I do want to answer.

The answer, first of all, is I did not make any request of $65 billion or anything of that kind. You are making the error of believing the rumor you read in the newspaper.

Senator Kennedy. Will you tell us what you requested of OMB?

Secretary Weinberger. $305.

Senator Kennedy. So, the report that you requested $322 and you were cut by OMB to 305 is not accurate?

Secretary Weinberger. A hundred percent wrong.

Senator Kennedy. Were you cut by OMB at all?

Secretary Weinberger. Will you give me an opportunity to explain that?

Senator Kennedy. Did you request a higher figure from OMB than you received?

Secretary Weinberger. No, sir. We did not. We got what we asked for. It is a proper justifiable figure. We all have our ideas of responsibility.

The President is given the responsibility by the Constitution and by the Congress to submit to Congress the amount he thinks is required.

It is not the responsibility of the Congress to force him to submit the amount that they wish him to submit. They have the responsibility, and they certainly exercise it, of voting the amounts that they think are proper.

Last year the budget resolution was regarded as practically a sacred cow, yet the budget resolution was totally ignored when it came to voting for defense spending.

Senator Kennedy. Despite this, even with what Congress appropriated, the President said we are safe, we are secure, we are strong. He gave that to the American people in the state of the Union message.

Let me go on to another item, your response to an earlier question on Honduras.

COMMITMENTS TO HONDURAS

Are we basically, through some form of back door expenditures, establishing some permanent commitments in terms of facilities and manpower to Honduras the way we have in Korea and in the way we have in Europe?

Certainly it would appear from your testimony here today that we are forming some permanent kind of cadre there. It is important that the American people understand it in an area of the world of very great unsettlement.

I think it is important that we explain to the American people exactly what this administration intends to do prior to the election so that we don't wake up with some kind of commitment after the election which we had no knowledge of or understanding about.

Secretary Weinberger. Let me say the answer to the question on Honduras is no.

As to your characterization of what we are doing in Korea and Europe, you are talking as if there is no authorization for it, that the Congress does not want it.

Senator Kennedy. To the contrary, I said Congress has an understanding of the nature of the commitment that we do have in Western Europe, that we do have in Korea.

Now we want to understand the nature of the commitment we are making in Honduras and whether that will be of a similar quality and nature. That is my question.

Are you trying to do through the back door what has not been done through the front door with congressional understanding and approval and that is in the commitment of troops on a permanent basis?

Certainly it would appear that that is what we are involved in. I want to give you the chance to say that that is not so and to give us some assurance that those troops are not going to be there on a permanent basis.

Secretary WEINBERGER. It is extremely hard to do so because your questions always run into my answers.

Senator KENNEDY. We have found over the years that this is the only way we can get a response.

Secretary WEINBERGER. I doubt that that is true either.

The simple fact of the matter is that the commitment to Honduras and the exercise in Honduras are before you in the form of the exercise budget of the Joint Chiefs.

They were before you last year. What we are doing there has been put on the table. There is no back door, but there is a very vital front door to enter and I very much hope you don't close it on us.

O&M BUDGET

Senator KENNEDY. Over the last 5 years the O&M has increased by less than 40 percent while procurement has increased by more than 120 percent in real terms in your 1985 budget.

So, the real increase in procurement is nearly twice as great as O&M. As someone who year after year has had a chance to see the charts about the conventional force and what we are facing in that area and then to find out exactly what is being requested in this budget is so significantly high and has grown in the area of procurement, when are we going to really address again the real needs in terms of conventional force in the O&M budget needs?

Secretary WEINBERGER. You are talking about O&M, not OMB?

Senator KENNEDY. O&M.

Secretary WEINBERGER. One of the principal cuts that took us below budget was operation and maintenance over strenuous objection.

It is necessary to restore that and we are trying to do so.

It is also necessary to keep on acquiring the things that we need to modernize and strengthen our forces so that we will have a credible deterrent.

The worry we have is that the Congress will cut the least popular of our requests, which happens to be operation and maintenance.

You have done it several times. I hope you don't do it this year.

Senator KENNEDY. I would point out even the Grace Commission found more programs that were started have been carried through to full-scale development and production because it is almost impossible to terminate these programs after they are started.

The result is too many programs competing for limited production funding. This in turn leads to inefficient production quantities, program stretch-out, and cost overruns.

Also shows the O&M account increasingly declining. This, I think, is our concern.

Secretary **Weinberger**. I hope you will give us what we request this year.

Chairman **Tower**. Senator Jepsen?

Senator **Jepsen**. Thank you, Mr. Chairman.

Mr. Secretary, at the request of the Subcommittee on Manpower and Personnel, the Department of Defense was to undertake a feasibility study of the concept of the Defense Health Agency.

DEFENSE HEALTH AGENCY

Under this concept the peacetime medical care provided by each of the services would be consolidated under a single health agency in an attempt to cut peacetime operating cost and also cut needless duplication.

Has the Department of Defense completed its study of this concept and what has been your finding?

Secretary **Weinberger**. No, sir, it has not completed it. We have not made a finding of it. We have been looking at it to see if we can deliver better health care at lower cost if we have some consolidation.

It would not in any sense mean the elimination of the service health component, but we are looking at every way we can to try to save money and do it more effectively, but we have not reached any conclusion on that, sir.

Senator **Jepsen**. General Vessey, do you have anything to add to that?

General **Vessey**. No. The Secretary reported the status of it.

I think it is an important thing to recognize as we examine the peacetime health care system that one of the greatest contributions is to the wartime readiness of the force.

We have to pay attention to both of those and not simply peacetime costs.

UTILIZING THE NATIONAL GUARD AND RESERVE

Senator **Jepsen**. Mr. Secretary, during the last year in the defense authorization process this committee made very clear its intent that the Department of Defense should accelerate the process of transferring more missions from the active duty to the National Guard and Reserve.

I know you addressed this earlier today.

Could you describe what new initiatives in this area are contained in the authorization request for fiscal year 1985?

Are there any new initiatives?

Secretary **Weinberger**. There is a continuation of the same process you spoke of last year. Indeed, there has to be.

We have clearly the intention and our budget requests the funding to rely on and try to increase the recruiting of Reserve and National Guard units, basically to do what we have been doing, and to continue to do it on whatever accelerated scale we can, given the fact we are increasing force strength in the Air Force and in the Navy.

REFUSING ISRAELI MEDICAL ASSISTANCE IN BEIRUT

Senator **Jepsen**. Mr. Secretary, also in the aftermath of the Beirut bombing on October 23 there were some questions raised about the fact the United States did not accept offers of Israeli medical assistance.

As a result, some seriously wounded service members were forced to wait many hours before arriving at hospital facilities. Fortunately it appears that there were no deaths as a result of the decision not to use the Israeli medical facilities.

My impression at that time was that a lack of any plans in advance was a major consideration in the U.S. decision, but I think we must now look to the future.

It is my understanding that a joint political military group is attempting to work out a set of contingency plans for use of Israeli medical facilities under the recently signed United States-Israeli pact.

What has been the progress of these efforts?

Secretary **Weinberger**. We have an agreement with the Israelis for our use of their hospital facilities.

We also have the ability to use them without an agreement as they have the ability to use ours without an agreement.

I am glad you raised the point about the Beirut tragedy because there was a totally incorrect set of rumors that started to flow at that time. It was rumored that there was some refusal on our part to use Israeli hospital facilities.

That was incorrect. The Israelis made the offer which I received directly from the Defense Minister by noon of that terrible Sunday. It was 6 o'clock Beirut time in the evening.

It was immediately passed on to General Vessey and to the field commander. Their report was in effect that they deeply appreciated it, but by that time they did not have any requirement nor had they had any requirement for any additional hospital facilities.

This was looked into carefully by the Long Commission and by the House Military Affairs Subcommittee and both of them reached exactly the same conclusion.

In other words, it was not a refusal to use Israeli facilities at all. There was a report that, first of all, a reference to the fact they were available and a response that they appreciated it very much, but didn't have need for it.

There was an attack on an Israeli garrison a few weeks later. I made exactly the same kind of offer to Mr. Arens by telephone.

He responded that he again deeply appreciated it, but they had no need for additional hospital facilities. They wanted me to know how much they appreciated the offer.

There were a lot of unfortunate misunderstandings about that. I was glad that both committees examined it and the House committee and Long Commission reached exactly the same conclusion that there had been no refusal whatever.

We now have an agreement with Israel, a formal agreement, whereas they were informal before, that can authorize the use of those facilities on an exchange basis whenever the situation might require it.

Senator **Jepsen**. Final question, Mr. Chairman.

UTILIZING ISRAELI INTELLIGENCE

Mr. Secretary, another area that disturbs some of us since my trip to Beirut in February last year, is the obstacles that seem to have been erected against the exchange of intelligence information between the Israeli and United States contingent of the multinational peacekeeping forces in Beirut.

It is difficult to understand why such obstacles existed since the fact that the Israeli intelligence network is accepted generally as the best in the Middle East and for a time at least Israeli forces at that time and U.S. Marines were next to each other.

If you can discuss this issue in open session, Mr. Secretary, what use is being made of Israeli intelligence now and, more importantly, is this information being relayed directly to local commanders in that area?

Secretary WEINBERGER. The answer is clearly yes, it is. There was never any situation in which we were not utilizing Israeli intelligence and they were utilizing a great deal of ours which is also extremely sensitive and very effective.

These are again types of stories that sometimes arise in these situations. Fortunately I tell you they are simply not true.

We did have a multinational force and we have had a multinational force that came in at the request of the Government of Lebanon, but we did have a situation when they went in whereby there was a conflict between the Israeli army and other elements in the same area, some of which were opposed to the Lebanese Government and some of which were not.

There wasn't any refusal to exchange intelligence information, but the multinational force had a mission which made it essential to operate as a multinational force and not as a direct adjunct to any other forces, Syrian or Israeli or Palestinian.

There was no failure to exchange intelligence information.

Do you wish to add anything?

General VESSEY. I think you have covered it.

Senator JEPSEN. That you have. Thank you.

Chairman TOWER. Senator Bingaman?

Senator BINGAMAN. Thank you, Mr. Chairman.

EXERCISES IN HONDURAS

One of the concerns expressed is that the exercises in Honduras are being used as justification for establishing a permanent military presence in Honduras.

I think you have indicated that was not your understanding.

Another concern, though, that I have is that the exercises are a way to build a substantial number of military facilities or infrastructure which the Congress never gets to vote on in military construction budgets.

For example, I was there in December and saw six airstrips in Honduras, at least two of which were in excess of 8,000 feet and were hardened.

I was wondering how long an airstrip needs to be before it is a military construction item that we would get to pass judgment on?

Secretary WEINBERGER. I don't know the definition used by the committee.

[Additional information follows:]

AIRFIELDS IN HONDURAS

With regard to the two paved airfields in Honduras with runways in excess of 8,000 feet, they are La Mesa and La Ceiba. Both fields were built by the Honduran Government for civil and military use and have been in operation for many years. A third airfield, Palmerola Air Base, is currently being constructed with a runway over 8,000 feet. This construction was underway in 1982 when the U.S. access agreement was negotiated. Included in the fiscal year 1983 MILCON budget request was a project to increase the length and provide parking apron and fuel storage for U.S. Air Force contingency use. Congress approved and funded this request and the work is being accomplished under the supervision of the Corps of Engineers.

I do know that when we do an exercise that involves bringing in troops by plane or involves bringing in supplies by plane, we obviously have to have facilities in the area where we are exercising to carry out the mission of that particular maneuver.

What has been done in Honduras is fully consistent with that.

I was down there several months ago. I saw some of the strips established for exercise purposes; they looked very much to me to be within the World War II definition of temporary airstrips. There wasn't anything very elaborate about them. They enabled the planes to land and take off.

The thing I was impressed with was the hospital which consisted of a great many inflatable buildings that went up quickly and are easily dismantled, but were performing valuable work to the community as well as valuable training.

There is no intention to do anything other than conduct maneuvers. It is an area where it is important for obvious reasons for our national security and high defense priority of safeguarding the Caribbean and those approaches to the continental United States that we do maneuver, maneuver regularly.

ANTISATELLITE WEAPONS

Senator **BINGAMAN**. Let me ask on a different subject, one that Senator Cohen asked you about, antisatellite weapons that are being developed.

I gather you said earlier that we are not in a position now to negotiate an agreement on them because we are substantially behind the Soviets in developing these antisatellite weapons.

Is it also true, in your view, that we have a great deal more to lose if such an agreement is not agreed to than the Soviets because we depend so much more heavily upon satellite capability than the Soviets do to find out what is going on there?

Secretary **WEINBERGER**. It is not clear that we depend more heavily. We depend on it very heavily. They depend on satellites to a great extent, too.

The fact of the matter is that you have to look at it from the point of view of a successful negotiation. You have to ask yourself what possible inducement is there to the Soviets with an antisatellite capability to sign an agreement giving it up in the absence of our having one?

What are they going to say if we ask them to give up theirs and we promise not to develop one?

I think you won't get very far. I think it is vital in the absence of Soviet negotiators even from the table in the other two negotiations, that we not sit idly by and hope somehow that the situation will improve itself and not take long, difficult and admittedly expensive steps to develop an antisatellite capability.

Senator BINGAMAN. I think one of the thrusts of Senator Cohen's question was, have we actually tried to get any kind of preliminary discussion going with them on this type of agreement?

Secretary WEINBERGER. Yes, there have been preliminary discussions. There has been a preliminary discussion of a number of things including the confidence building measures that Senator Warner and Senator Jackson and Senator Nunn were very instrumental in urging be adopted.

There have been preliminary discussions attempting to set agendas for a number of different subjects, but they are progressing with somewhat less than glacial rapidity.

They are not leading us in a situation where I feel I can carry out my responsibility without coming and asking you for the means to develop this kind of capability.

If we could get a treaty that is fully verifiable, and an antisatellite treaty is difficult to verify, and one that provides for reductions consistent with our national interests, I would be delighted.

Senator BINGAMAN. Because of the problems verifying an antisatellite treaty, wouldn't it seem that the only real chance of restricting antisatellite weaponry development is now before those weapons are completely developed and in place?

Secretary WEINBERGER. It might have been if the Soviets had not developed theirs and conducted many tests with it.

Senator BINGAMAN. In your opinion, there is really no chance of restricting that deveopment?

Secretary WEINBERGER. There is always a chance and we should take every possible means to realize that hope. There is a difference between doing that while you sit idly by and doing that at the same time you are gaining a capability just in case.

STRATEGIC DEFENSE INITIATIVE

Senator BINGAMAN. Let me ask about the strategic defense initiative that you have in the budget.

I notice the figures you are asking for, I think it is $1.5 billion in 1984, $2.4 billion in 1985, $4.5 billion in 1986, and then no estimates after that.

Do you have any kind of ballpark estimate for what it would cost to implement what the President has in mind in this strategic defense initiative?

Secretary WEINBERGER. Not at this time, Senator, no. The request this year and some of the reprograming from 1984 is designed to give us the understanding as to whether or not we can do what we would like to do, and then to look at a number of different options by which we might be able to do it and then to estimate what the cost of that would be.

My own feeling is that the cost of it would be fully warranted if we could protect our people from nuclear weapons by having an effective defense against them.

If we can do that before the reentry vehicles enter the atmosphere, I think we would have a lot safer world.

So, it would be worth quite a lot of money. I don't have an estimate in the outyears. Even your 1986 figures are not ours.

Senator BINGAMAN. I notice we are proposing in this budget to spend a substantial amount on countermeasures to the Soviet antiballistic missile efforts.

To the extent that those exist or are developed, do we have any reason to think that the Soviets would not be going forward to develop countermeasures to the strategic defense initiative you are proposing?

Secretary WEINBERGER. Yes. They are also going forward to develop a system of their own.

If they should achieve an effective system of their own and we did not have one, so that our missiles were rendered impotent and theirs were not, that is not the kind of world I think any of us would want.

Senator BINGAMAN. Is there anything in this antiballistic missile defense race that holds out hope for a more stable point in the future than in the other types of arms races that we have been engaged in?

Secretary WEINBERGER. If we can get a system which is effective and which we know can render their weapons impotent, we would be back in a situation we were in, for example, when we were the only nation with the nuclear weapon and we did not threaten others with it.

On the contrary, we tried to build up all our friends with their conventional strength and we did not try to dominate or blackmail the world.

I think if we can get this kind of capability, it would offer infinitely more hope than anything else we are doing, but we don't know we can do it.

We know we can't do it now and we know we must work at it assiduously and that is why I hope the request will be approved this year.

Senator BINGAMAN. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman TOWER. Senator Quayle?

Senator QUAYLE. Thank you, Mr. Chairman.

I have had the privilege to sit here and listen about 3 hours, Mr. Secretary. I would like to make a quick observation.

PROVIDING AN ADEQUATE DETERRENT

Compared to last year, with a few exceptions, I find the mood far more conciliatory. I believe there is a sincere recognition on your side that we have to deal with the issue of providing an adequate deterrent, in much more of a consensus fashion than we have done in the past.

I get the feeling there will be less confrontation this year.

Beyond your taking credit for restoring readiness in your policy statement, I would like to bestow on you the fact that you have certainly changed the debate in this country in the last 3 years.

The debate used to be whether or not we were going to cut defense or increase defense. With very few exceptions, it is almost universally agreed we are now going to increase defense—the question is how much.

That is an accomplishment that you and the President have made and I think it is a very significant one. One which you don't have in your posture statement and one that should not go unreported.

Secretary WEINBERGER. Thank you.

SECURITY ASSISTANCE TO JORDAN

Senator QUAYLE. My first question deals with the press reports that have been in the public concerning our possible security assistance to Jordan.

Can you comment on what you will be recommending to the Congress regarding those public reports?

Secretary WEINBERGER. There have been a lot of public reports and there are a lot of delicate negotiations with the King of Jordan going on.

Essentially the proposal, and whether it is still acceptable to Jordan or not, I do not know, was that we would try to give them an added capability to defend themselves and to defend against instability in the Mideast of some of their neighbors caused by Soviet activity and it was to add to the basic deterrent strength in that very volatile region.

It was, of course, best done on a covert basis. As you have indicated, there has to be a great deal of discussion about it.

The basic objective remains the same. The realization of that objective would add greatly to the security of all nations in the region, specifically including Israel.

Senator QUAYLE. So it will be in the fiscal year 1985 budget request?

Secretary WEINBERGER. To the best of my knowledge, it is in the fiscal year 1984 supplemental rather than the fiscal year 1985 budget request.

Senator QUAYLE. How much is it?

Secretary WEINBERGER. Roughly the $200 million range. Ultimately it is dependent on whether there is still support by the King of Jordan for the idea.

There was before, but whether there is or not now, I don't know, because of the discussion and all the problems.

Senator QUAYLE. I am sure at various times there will be consultations with the King and others as to whether you will push to keep this request in the fiscal year 1985 budget; is that correct?

Secretary WEINBERGER. That is my understanding. I have no doubt whatever in telling you I think it should be adopted.

Again, we are in a situation where obviously the other nations specifically involved do have to reaffirm their basic support for it.

Senator QUAYLE. I would suggest as you consult with the King and others to see how far you are going to push this that we have fairly close consultation with the Congress on this issue.

I believe there may be some particular problems we would like to point out to you as we go down the road because it looks like the Armed Services Committee will be the first committee to deal with it on a substantive basis.

Secretary WEINBERGER. That is good advice. We did, of course, consult, when it was submitted, with Congress on the other basis.

I would reiterate I think it would add greatly to the security of the whole region.

Senator QUAYLE. I understand.

STRATEGIC SUPERIORITY OR NUCLEAR INFERIORITY

General Vessey, I detected a little bit of discomfort in your trying to respond to Senator Nunn's question on whether we as a country have strategic superiority or nuclear inferiority, or however you want to phrase that.

The question is whether we have it now, not in the 1990's. I understand the complexity in making that judgment.

Would it not be true that if in fact we did not go forward with the strategic modernization program, that we would be inferior now and also in the 1990's?

Is that a correct statement?

General VESSEY. There is no question about that. If we don't go forward with the strategic modernization, we are going to find ourselves inferior.

Senator QUAYLE. If we don't move forward, we may begin to incrementally cut and we may not have the political will to sustain the modernization program.

Can you say as Chairman of the Joint Chiefs of Staff that once we create that situation, we would be inferior now and in the 1990's?

General VESSEY. If we exhibit the lack of will to go forward with these programs, we have conceded our inferiority.

Senator QUAYLE. We have conceded we would be inferior?

General VESSEY. Yes, and in terms of the perception by the rest of the world, we would be termed inferior for having made that decision.

Senator QUAYLE. I have been on the Armed Services Committee for 3 years. Every year that question comes up. No one likes to be pinned down.

To get a clearer picture, I think we have to make a few assumptions.

Secretary WEINBERGER. It is a moving kind of thing. It will take us several years to acquire the modernized bomber strength.

It will take several years to acquire the submarines.

The Congress has authorized it, we are proceeding. The same with the MX.

General Vessey said we are deterring attacks. That is a very big part of it. Tomorrow comes very quickly.

If there is a perception we can't continue along the path we have started, then the situation becomes increasingly dangerous.

Senator QUAYLE. It is far more clear from what General Vessey said that we would be deemed not only in real terms but, in the eyes of the world, as being inferior.

PROCUREMENT BUDGET INCREASE

Mr. Secretary, I am looking here at budget authority by title. The large increase is in procurement. You go up from $86 billion to $107.6 billion which is an increase of $21.6 billion.

If you look at 1985 and 1986, is that procurement figure about half the total DOD increase? We don't have it on this particular chart.

Secretary WEINBERGER. The procurement increase goes up, as you say, $21 billion. That is essential because that carries out the programs we started.

Senator QUAYLE. Does the next year go up by about that amount, too?

Secretary WEINBERGER. No, procurement went up 2 percent last year, Senator.

Senator QUAYLE. It went up from $6 billion in 1980 to 1986?

Secretary WEINBERGER. We have to go up more this year to make up for it.

Senator QUAYLE. It hits you right in the face when you look at the numbers there. You see an aggregate increase of $46 billion. Procurement is $21.6 billion. That is the toughest item that nobody likes to cut.

There is a constituency in the Pentagon that comes up to Capitol Hill to get us to put it back in.

I understand from your testimony this morning that there are only two new programs in this $21 billion.

What are the new add-ons in procurement this year, new starts?

Secretary WEINBERGER. I can get them for you specifically. Basically it is a continuation. We have 34 B-1's, 48 F-15 fighters, 150 F-16 fighters.

Senator QUAYLE. Those are ongoing programs?

Secretary WEINBERGER. Yes, the follow-on submarine and cruiser.

I am just told the DDG-51 which is the new attempt to get a guided missile destroyer. There is not much room for it, Senator.

That is the point I made earlier. Fifty-eight percent of your budget is ongoing continuation of what you did before.

Senator QUAYLE. Looking strictly on a budgetary basis?

Secretary WEINBERGER. You are quite right, it is a big item. It follows on in a normal pattern of continued procurement.

Another very large item is $11 billion. That is the inflationary aspect of continuing to do what we are doing now.

Even though inflation is way down, in a budget of our size, just continuing to do it even with a 4-percent rate of inflation will add about that amount to next year's activity just to continue them because of that predicted rate of inflation.

You don't get fire power from that, but you have to do it.

Senator QUAYLE. Another question I have is on your strategic defense initiative.

I would like to know if you can tell us who is going to manage that program and how is it going?

How are these funds going to be allocated?

Secretary WEINBERGER. The individual has not been designated, but it will be a small organizational group directly under me in the Office of the Secretary, and the funds will be allocated out by that group, or that individual to the various services and others who will be doing the research and the development.

The President specifically directed it should be managed in that way and that it should be managed in effect by people who do not have other duties, but who are directly there working on that one subject because of the importance he attaches to it.

We should have a name for you, I would hope, in a very short time.

Senator QUAYLE. In the next few weeks we will have the individual's name?

Secretary WEINBERGER. Yes.

Senator QUAYLE. Thank you, Mr. Chairman.

Chairman TOWER. Senator Wilson?

Senator WILSON. Thank you, Mr. Chairman.

We are still on fiscal year 1985 budget, are we not? Not 1986?

Mr. Chairman, I couldn't help noting as did Mr. Quayle the difference in the tone this year and I commend it because as a matter of fact Chairman Vessey concluded his statement as I was going to begin mine by quoting from our late colleague, Senator Jackson.

I don't know whether the chairman noted at the time that he did, but this comment by Senator Jackson was made at precisely this time last year. It was at this hearing.

What he did say was that he hoped this would be a time of steadiness, not only in reality, but in appearance that will give confidence to others.

I hope that he would be heeded in death as he was often in life, but unhappily last year this committee heeded him, but the rest of the Congress did not. His death in the August recess prevented his seeing the Congress react to a budget resolution by undercutting it by some 2 percent.

That has been said already. Most of it, as has been indicated, was taken from the operations and maintenance budget and that does make a difference in readiness. The reason, I think, is perhaps a number of people decided that if they were going to cut, it would be bad because of the lead time required for procurement.

MODERNIZATION ESSENTIAL

I am afraid that is an inescapable fact of life. The modernization upon which we have spent much time this morning is an inescapable fact of life if we are going to bring about a deterrent, whether we are talking about strategic or conventional forces.

I would note that I think that the President's initiative with respect to the antiballistic missile defense, so-called strategic defense, is absolutely essential.

I think that the Secretary's statement with respect to Soviet research not only necessitates our research, but I think it is inescapable based upon past performance that the most optimistic expectation that we could have is that they would become serious about strategic arms reduction if in fact we were to achieve at least an adequate antiballistic missile defense.

In the conventional area there has been discussion this morning about the fact that we face threats in many theaters, not just in NATO or in the Far East, but in many other parts of the world.

MEETING THE MULTITHEATER THREAT

In order to prepare to meet the multitheater threat, we have to be concerned with a force projection capability and quite specifically with the adequacy of our airlift capability.

I am pleased to note that in the report that you are making to us this morning there is the recommendation for full-scale engineering development of the C–17 aircraft. I commend that.

Am I correct that there has been a decision of the Joint Chiefs in support of that recommendation?

Secretary Weinberger. To the best of my knowledge, yes, sir.

Senator Wilson. I would be grateful if you would provide for the record a comparison of the airlift capability between what actually occurred in transporting the troops that were involved in the joint exercise with the Honduras armed services, Pine Tree I, making use of the C–5 aircraft and 141's and what would have been required in trip loads using the C–17?

Secretary **Weinberger**. The C–17 is the follow-on plane that will replace many of those that give us added capability, but we will be glad to do that.

Senator **Wilson**. Also I was struck by some of the steps that you are taking with respect to trying to achieve procurement savings.

What is the exact nature of the incentive provided employees?

ACHIEVING PROCUREMENT SAVINGS

Secretary **Weinberger**. We have cash awards for employees.

We gave a cash award recently, I believe, in the amount of $10,000 or $12,000 to a Navy chief whose idea was going to save us well over $2½ million to $3 million by finding and reporting some of the methods of procurement that could be vastly improved. We have given at least three others that I am personally aware of to those who earned awards.

There are those incentives as well as disincentives for people who are being sloppy in their work and letting it go by and not paying sufficient attention to the need to order in the most economical way possible.

Senator **Wilson**. What is the exact formula that you use? Is it a percentage of the estimated savings?

Secretary **Weinberger**. For the award?

Senator **Wilson**. Yes.

Secretary **Weinberger**. There is no fixed formula. Sometimes it is based on estimate of savings. Originality, creativity of the effect, et cetera are factors. There is no exact formula. It may result in a substantial cash award. It is a matter of judgment by the evaluator.

Senator **Wilson**. I would suggest that your experience may be no different than was mine in a different context as mayor of a large city, the seventh largest city in the United States. Making use of a similar device, we saved over a period of years millions of dollars.

With all due respect to the patriotism of those within the Department of Defense, I would suggest that something more than a psychic compensation is a wise and profitable incentive.

I would just conclude by pointing out, as I think the chairman has done at greater length and with great eloquence in his written statement, that the kind of steadiness Senator Jackson hoped for for this body is in question, based on the record, and in terms of what we are committing to—the defense effort as contrasted with other spending.

I think it is interesting to note that President Carter estimated that there would be some $290 billion in defense outlays in fiscal year 1983. That, I estimated, is about 5 percent less than the rate the administration requests now.

Beyond that if you compare the difference to what is the estimated deficit for this year, it is less than 10 percent of that deficit. I think the real answer, if anyone is interested, is shown in your chart No. 10 which shows these converging lines of defense spending and entitlement spending.

I don't anticipate that we will really get to a serious addressing of the deficit until next year.

Thank you, Mr. Chairman.

I thank the Secretary and Chairman Vessey.

Secretary **Weinberger**. Thank you.

Chairman **Tower**. That completes our first round of questioning. I am aware that the Secretary has other responsibilities. I would like to afford the members remaining here the opportunity to have followup questions.

Incidentally, let us limit each member to 4 minutes.

Senator Nunn?

Senator **Nunn**. Mr. Secretary, I will recite figures here for the record.

You made a very important point about the difference between the Reagan defense budget and the Carter defense budget and the question of how that either did or did not contribute to the staggering deficit we have now.

You say over the 5-year plan $12 billion in outlay difference has evolved from various exchanges between the Carter budget and Reagan budget.

Is that correct?

Secretary **Weinberger**. That is essentially correct. There is one factor that has to be in that equation, Senator. That is inflation has been cut down very, very substantially from 12 percent to about 3½ percent.

Senator **Nunn**. I think that is important. I agree with you, I do believe that the deficit we are experiencing at the moment and the ones we just experienced have not been greatly affected by the difference between the two defense budgets, Carter and Reagan.

However, the budget authority is a different story. In 1982 to 1986 the budget authority has increased. It was originally proposed at $185.9 billion.

What is left of that after the various cuts is $93.4 billion. That is in that same period of time you are comparing the $12 billion in outlays.

Really what that tells us, No. 1, as you have correctly observed, the outlays difference between Carter and Reagan has not been the cause of the deficit we have so far experienced.

But when you look at the deficits for the next few years, that is when we are going to pay the bills for this budget authority which is $93.4 billion.

What really is the bottom line is that we have not yet paid for the differential between the Carter defense budget and Reagan defense budget. Those bills are coming due in the next 4 or 5 years. That is a matter of debate.

It is just a matter of where we are going.

Secretary **Weinberger**. Let me make two points quickly, if I can, Senator.

Part of the payment has been made in the added strength we have obtained.

The second point is that defense spending does not contribute dollar for dollar to the deficit.

As you know, if you cut defense spending by a dollar, you don't cut your deficit by a dollar, but cut it by 50 cents.

READINESS OF U.S. FORCES

Senator Nunn. General Vessey, comparing now with 1980, do we have more Active Army divisions than we did in 1980?

General Vessey. I think we are exactly the same.

Senator Nunn. Do we have any more Air Force wings than in 1980?

General Vessey. I think we are the same there. I would say that the divisions are better.

Senator Nunn. Fleshed out?

General Vessey. They are up to strength and they have modern equipment. The same with the Air Force squadrons.

Senator Nunn. Do we have more or less Active Army divisions rated fully combat ready than we did in 1980?

General Vessey. I would have to look at the record.

Senator Nunn. Could you furnish that for the record?

General Vessey. Yes.

Secretary Weinberger. The overall figure is 39 percent more total combat units ready than they were previously.

Senator Nunn. I have some real questions on that figure. I am talking about strictly whether we have more or less Active Army divisions rated fully combat ready than we did in 1980?

The same question as to naval combatants rated fully combat ready than in 1980.

The same question as to Air Force squadrons rated fully combat ready than in 1980.

[The information follows:]

Readiness of U.S. Forces

General Vessey. First let me answer your question concerning the "C" ratings which are one dimension of evaluating force capability. For the Army, the percentage of divisions reporting C–1 and C–2 was about 12 percent lower in October 1983 than it was in October 1980. However, the percentage of divisions rated at C–3 increased 38 percent over the same period and the percentage reporting C–4 decreased by 50 percent. If one looks at the total of Army divisions, separate brigades, regiments, and separate combat battalions for the same period, the percentage of units C–1 and C–2 increased by 19 percent. Many of the changes are the result of modernization of parts of the force and a consequent lowering of the unit's readiness as it outfits with new equipment. The decline in Air Force tactical squadrons readiness of 15 percent is traceable to increased flying hours resulting from an expanded force structure which had to be supported by an underfunded, peacetime spares procurement program. Spares procured with fiscal year 1981 and fiscal year 1982 funds are just now entering the supply system and we expect to see an improvement. The percentage of Navy major ships and fixed wing units reporting C–1 and C–2 have increased 23 percent and 48 percent, respectively, since 1980.

Having said all that I must add that we have a more capable and more ready force than we did three years ago. The problem with the Army and the Air Force is that "C" ratings are not an adequate expression of overall capability. And, indeed, can give a mistaken impression if taken alone. If modernization of the Army and increased pilot training in the Air Force do not contribute to readiness, we shouldn't be doing them. However, capability and true readiness is a composite of unit readiness today, the force structure, and modernization and sustainability. Positive accomplishments have been achieved in each component of capability. First, higher numbers of quality people and increased retention rates, improved equipment availability and investments in training have improved unit readiness in all Services. Second, the restructuring of heavy divisions under the Division 86 Concept, procurement of additional airlift and amphibious lift, and the addition of capital naval ships have enhanced U.S. force structure.

Third, fielding of new fighting vehicles, procurement of F-15 and F-16 fighter aircraft and delivery of modern naval combatants represents the most extensive, qualitative modernization effort in years. Finally, funding received for spare parts, increased quantities of war reserve materiel and stocks and continued pre-positioning of equipment and supplies have improved our sustainability posture. As you can see, substantial progress has been made in overall force capability and we project a continued, gradual, steady improvement in fiscal year 1985 based upon the current budget.

Secretary WEINBERGER. We should also add that the results will be better when the authorization appropriations that have been made take effect.

Senator NUNN. I want to know as of now.

Secretary WEINBERGER. We will get that.

Senator NUNN. As of now, what are the combat readiness statistics compared to 1980?

I think you are going to see the figures are going to show we do not have more Army divisions rated fully combat ready. In fact, we have fewer.

I think the same thing is true of the Air Force squadrons.

I think in the Navy we have more.

I am trying to make a gigantic point, but I think sometimes we greatly oversimplify the way we measure these matters.

One of the reasons is the modernizing of equipment.

Secretary WEINBERGER. That is right.

Senator NUNN. These are the figures that the campaign was largely run on in 1980, fully combat ready divisions, number of squadrons ready and the interesting figure today is that we have less in both the Air Force and the Army.

I am just making the point, not that this is crucial one way or the other, but I think we need to find difficult ways of measuring our own military strength. I think we are lacking in our ability to measure our strength vis-a-vis the Soviet Union or vis-a-vis our strength 3 or 4 years ago.

When I see a presentation like this today and we talk about U.S. tanks versus Soviet tanks, all of that, and we are an alliance posture, I have to say what are we talking about?

MEASURING NATO VERSUS WARSAW PACT

We have to measure NATO versus Warsaw Pact. You make the valid point that we are spending less than the Warsaw Pact in terms of equipment. We are spending more overall. That is not being said. We are spending more overall. We have a tremendous disparity in manpower.

I am saying if we are going to make sense out of this budget and have a steadiness of purpose about which General Vessey and Senator Wilson quoted Jackson, we have to find a different way of measuring.

Secretary WEINBERGER. I would disagree with the conclusion that we have fewer combat units ready now than we did then. We have more.

Senator NUNN. Army and Air Force. I believe if you will check it out, you will find we are correct.

General VESSEY. You will find more Army units ready. The divisions are only 16. So, in numbers altogether there may not be any more divisions ready, but when you take the total Army force structure down in the combat service support, combat support, you will find more readiness.

Senator **Nunn**. This is entitled "Table 401, Readiness Data, Summary, Major U.S. Active Combat Units."

General **Vessey**. I am sure what you have is correct. I am simply saying the divisions do not reflect the whole Army by any manner of means.

There is a lot more readiness beyond just simply the divisions.

Secretary **Weinberger**. There is a lot of reorganization going on. We are also creating new light divisions and things of that kind, but the accuracy of the measurement and need to get accurate measurement is important. I am sure nobody could possibly quarrel with that.

Chairman **Tower**. Senator Quayle?

Senator **Quayle**. Mr. Secretary, I notice in the posture statement compared to last year there is more reference to instabilities in the Third World and that, therefore, since we have a potential for more instability, we have increased military requirements.

THIRD WORLD PROBLEMS

Can you tell us in general terms how problems in the Third World are driving additional requirements of the military and how that would translate into the recent requests for funding?

Am I correct in that analysis that this year as compared to last year you pay more emphasis to that?

Secretary **Weinberger**. I think you are correct. I think it is caused by the continuation of two things.

One is the continuation of the poverty in those areas. It is very hard to address that until you can get a sufficiently stable situation to encourage investment that can produce jobs and relieve some of that poverty.

The other factor is a continuing one and that is the Soviets fish in troubled waters in the Third World and they do so with great frequency and great regularity.

Our Grenada action demonstrated that. Certainly you see a combination of those problems in Cuba, Nicaragua, and in the guerrilla activities in El Salvador and in a good part of the Mideast.

So, there is a continuing fostering of trouble and instability in these areas and that, of course, means we have to recognize that this may indeed require us, if we want the kind of stable situation in which peace can flourish, to do more in those areas.

Senator **Quayle**. In doing more, what would more be? What increased military requirements do we need to meet these problems?

CARIBBEAN INITIATIVE

Secretary **Weinberger**. First the Caribbean Initiative is a very good indication. Some two-thirds of the funds requested for all of those areas were for economic assistance.

There was a clear recognition that you can't effectively deploy economic assistance until you have a stable situation that permits the investment to be realized.

Senator QUAYLE. What about exclusively military needs that we need to develop to meet this increasing threat of instability in the Third World?

I understand we need stability, and economic assistance is part of it as well as military assistance. I am looking for direction from you as to what new military spending we need and the direction that we in our national defense posture will have to go to meet this need.

General VESSEY. Two parts.

One is security assistance, a good sensible security assistance program to help those countries that are in trouble and then putting in our own military resources, which means the people, the trainers, to help those countries where they need it.

The other is in our own special operations forces that give us the type of light forces easily transportable—giving us the ability to go in and help those countries that need that sort of help.

Much ado was made about the exercises in Honduras. I think that is a good example of what we can do to help the Third World.

Senator QUAYLE. Thank you.

Chairman TOWER. Senator Exon?

Senator EXON. Thank you, Mr. Chairman.

Mr. Secretary, 1 hour and 20 minutes ago the budget was released. I thought I would give you a chance to be more forthcoming.

Secretary WEINBERGER. We have a few additions we are proposing.

Senator EXON. One of the things you were asked about earlier, and I understand from staff it was established while I was out of the room, is that there is $200 million in the budget for the Rapid Deployment Force in Jordan.

Is that correct?

Secretary WEINBERGER. That is correct.

Again, while you were out of the room I also made the point that it depended entirely on the continued willingness of the Kingdom of Jordan to go along with the basic program that was there before.

So, I can't give you as definitive an answer as I would like to until those consultations have been held. There has been a great deal of discussion about what was previously, for very good reasons, a covert program.

There is still a need. The need has not changed at all.

Senator EXON. I am picturing myself sitting over in the Budget Committee, where I will be very shortly, looking at this. We will be looking at places to make reductions.

Let us say somebody else brings up the argument that there is $200 million we could cut because it is questionable whether it will be used or not, would you think that might be a place where we could do some trading or would you say that it is one of the highest of all priority items?

Secretary WEINBERGER. Certainly the ability to deter attack in the Mideast is a very high priority of our Nation. This program is one that could contribute substantially to that priority objective.

Certainly at that time I would want to have as clear an idea as I could of the Jordan Government's attitude, in view of the fact that what was previously a covert program has now been discussed so freely that some of its value has unquestionably been lost.

Senator EXON. One other question.

SALT II TREATY

Both the United States and the Soviets have indicated that they will live up to the SALT II Treaty, although it was not ratified.

I assume that is our present intention. Is that correct?

Secretary **Weinberger**. There has been no change in that publicly stated posture that I am aware of sir.

Senator **Exon**. In that regard, can you help clarify for me what we intend to do?

Sometime next year I believe we are scheduled for sea trials on our latest Trident. That will be the seventh Trident, I believe.

Secretary **Weinberger**. The fourth Trident was just delivered and will deploy by year's end.

Senator **Exon**. At that time I believe we will be some 13 or 14 missiles over the requirement in SALT II.

What are we planning to dismantle or give up at that time to make up that difference?

Secretary **Weinberger**. SALT II is supposed to expire in December 1985. I don't have the delivery date or the deployment date of the seventh Trident, but I don't think that will occur, certainly not the completion of the sea trials and final delivery, until after that date.

It is our intention, as the President has said, to try to observe the provisions of SALT II while it would have been in effect, but it does expire in December 1985.

Senator **Exon**. So, the present plans are that when that submarine comes into inventory, then we can go on and build above SALT II because SALT II then is null and void?

Secretary **Weinberger**. I can't give you a flat answer on that, sir, because I don't know the actual state of the other submarines that may be involved.

As far as the Trident class is concerned, the *Ohio* class, we are moving ahead with it.

That treaty that covered those or would have covered them, had it been enacted, will no longer be in effect after December 1985.

Senator **Exon**. Then I am accurate in assuming as of now we will be adding to our inventory and not reducing it?

Secretary **Weinberger**. I think you would be correct in assuming that as of now no other decision has been made than to proceed with the acquisition of the *Ohio* class submarines in accordance with the plans stated by the Congress and set forth in the longer range aspects of the budget.

Senator **Exon**. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman **Tower**. Senator Levin?

Senator **Levin**. Thank you, Mr. Chairman.

AVERAGE GROWTH IN DEFENSE BUDGET

Mr. Secretary, going back to your charts, chart 1, this chart which you presented us with today shows an average growth in defense budget authority in the 6 years before this administration's first budget of 3 percent real growth.

I presume that chart is relevant or else you wouldn't have presented it to us?

Secretary **Weinberger**. What number is it?

Senator **Levin**. Chart No. 13, I am sorry. Will you look at 1976, 1977, 1978, 1979, 1980, and 1981 and deduct the supplemental which you filed in 1981.

There is an average 3 percent real growth in budget authority during the 6 years before this administration's first budget in 1982.

Now, your own chart shows an average real growth of 3 percent in the 6 years before your first budget.

When I asked you about the CIA analysis showing 2 percent real growth in the Soviet budget during those same 6 years on the average, you said, well, that is not relevant, the real growth in the defense budget authority is not relevant.

Why is your chart relevant relative to the budget authority, but CIA's analysis of Soviet budget authority expenditures in real terms is not relevant?

Secretary **Weinberger**. First, because of the difference in the systems and the fact that that bare figure you used does not, in any sense reflect the enormously higher plateau from which they start, second, because it is not, in any sense, a complete picture of Soviet military spending, and finally, because, as I mentioned before, you have a situation in which only 11 percent of the Soviet budget, whatever it is, goes for personnel, while this year 43 percent and in previous years almost 50 percent, of our budget goes for personnel.

So, that leaves them somewhere around 88 to 85 percent of their budget for added military strength, while we have to get very close to half of ours before we can expend funds to add to our military strength.

It is that output that counts.

U.S. AHEAD IN CRUISE MISSILE PRODUCTION

Senator **Levin**. Is there any area where we are ahead in military production rates, we and other allies, of the Soviets?

Secretary **Weinberger**. We are ahead at the moment on cruise missiles. We are ahead in one sense, you can say, in very large, very heavy aircraft carriers.

But in most of the other aspects with which we have to deal in the real world we are not.

Again, we are not trying to get superiority. What we are trying to do is to regain a deterrent capability.

As General Vessey and others have indicated, we are on the road to that, but it is a long and expensive road, particularly when you had—if you don't like the word "neglect"—the lowered spending during many of the years past.

Senator **Levin**. Are we also ahead with our allies over the Soviet Union and their allies in refueling tankers, assault ships, AWACS aircraft and antiaircraft guns?

Secretary **Weinberger**. Not in antiaircraft guns.

As far as refueling is concerned, the Soviets have a full capability and much shorter lines of communications.

Senator **Levin**. Are you saying we don't produce more aerial refueling tankers with our allies than the Soviets and their allies?

Secretary WEINBERGER. I can get the exact numbers for you. I don't think there is a very large advantage, if there is, but there may be and that is because we have to rely upon the need to cover very, very long distances and the Soviets do not.

Senator LEVIN. General Vessey is shaking his head.

Do we outproduce the Soviets with our allies?

General VESSEY. In aerial refueling tanker, we do, yes.

Senator LEVIN. My point is you don't show us one area where we outproduce them. All you show over and over on your chart is production rates where they outproduce us.

Secretary WEINBERGER. I showed you on the chart the cruise missiles. The point is what we are talking about here is not who is outproducing whom. It is the nature and size of the Soviet threat. The Soviet threat is very large and increasing in the areas I have indicated.

There are some areas where it is very large, particularly, in the area of conventional and strategic warfare.

You and I can go and pick an item where we are ahead of the Soviets.

Senator LEVIN. What I am talking about is your chart 1 where you do not show cruise missiles. You show average Soviet production and our production. You pick out seven areas. In not one of them do we outproduce them the way I am reading this chart unless that chart was changed from this morning.

Looking at the one attached to your remarks, this is the same pattern last year, and the year before.

American people are never told the area where we are ahead. We are given a one-sided presentation which only shows the area where we are behind.

Secretary WEINBERGER. I don't know if you were able to attend the red-blue briefing that was offered, but that was an accurate portrayal of the areas in which we are able to do more and are doing more and the areas in which they are. It is not that they are ahead in every single category.

It is that they are ahead in so many critical categories, both conventional and strategic deterrence. That is what we have been talking about. We had said repeatedly we do not try to match them tank for tank, man for man or anything of that kind, but we do have to regain a degree of strength that will deter them from attacking.

Fortunately we are at the moment deterring attack, but none of us knows how much time we have and the most dangerous situation is when the ratios worsen as they have in many critically important areas.

Senator LEVIN. My time is up.

Thank you.

Chairman TOWER. I just want to make one statement about this question of strategic superiority.

STRATEGIC SUPERIORITY

I think what we are talking about is in terms of urgent hard target kill capability. When you consider the aspect—and, of course, that capability is largely in the intercontinental ballistic missile force—

when you consider various aspects such as numbers of warheads, throw weight, numbers of launch vehicles, hardness of silos, in fact in terms of urgent hard target kill capability, the Soviets are very clearly ahead of us.

Is that not true?

Secretary WEINBERGER. That is right. It is not enough just to count warheads.

MODERNIZATION VERSUS O&M

Chairman TOWER. On the matter of modernization versus operation and maintenance, is it not true that readiness is one of the functions of modernization? That in fact you could blow a lot of O&M money on old and obsolete systems when you would actually spend less money on O&M if you had the newer systems which are more maintainable?

General VESSEY. Not only maintainable, but more capable.

Chairman TOWER. That is true of the Guard and Reserves. The fact is that we are spending money maintaining nondeployable equipment in the Guard and Reserves right now, isn't that true?

General VESSEY. Yes, in minor instances.

Chairman TOWER. It should be understood that modernization is important and is a key part of readiness, not just operation and maintenance funds.

Further, it should be understood that security assistance should be a top priority because in fact the better able our friends are to defend themselves and to defend our interests in the region, the less likelihood we will have to resort to the use of our own force or at least reduces the level of intervention that will be required by us militarily in those situations.

The record will be kept open until 5 p.m. this afternoon for questions to be submitted for the record.

Senator Thurmond has asked me to submit his statement for inclusion in the record. There is one portion he particularly wanted read:

> Mr. Secretary, I would like you to note that you have done an outstanding job as Secretary of Defense. You have been subject to public criticisms that are not only unjustified, they often border on the absurd.
>
> I am astonished that one who feels strongly that our national defense is our Government's first priority would be subject to such vilification. Where I come from, Mr. Secretary, we have an old fashioned term for people like you and that word is "patriot".

That is the portion Senator Thurmond particularly directed me to read.

Secretary WEINBERGER. I will accept the compliment.

[Senator Thurmond's prepared statement follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Mr. Secretary, General Vessey, it is a pleasure to have you here today to receive your testimony on the status of our national defense. As I understand it, the increases in defense spending begun by this Administration are beginning to translate to increased readiness.

Much has been accomplished, but a great deal lies ahead. The various modernization programs underway for the Services must be continued if we are to meet the challenges that we will face during the twilight of the 20th century.

The reports I have received indicate that the quality of our personnel is at an all time high. Morale at the various installations I have visited is outstanding, which is partly due to a resurgence of patriotism and partly due to national leadership that does not treat our military leaders as second class citizens.

In the year just passed, our nation has had reason for great sorrow and joy. The savage attack on our young marines and sailors in Beirut should never be forgotten and those responsible should be sought out and allowed no sanctuary.

The Grenada operation, however, should be a source of pride to all Americans. General Vessey, the public has demonstrated overwhelming support for that operation, and although I very much regret the loss of life involved, it was most certainly the morally right thing to do.

This administration has often been criticized for its supposed lack of commitment to human rights, but I must say that those paratroopers, marines and sailors did more for human rights and individual freedom in a few days than the previous administration did in 4 years.

Mr. Secretary, I would like to note that you have done an outstanding job as the Secretary of Defense. You have been subjected to public criticism and personal attacks that are not only unjustified, they often border on the absurd.

Quite frankly, I am astonished that someone who feels very strongly that our national defense is a government's first priority would be subject to such vilification.

Where I come from, Mr. Secretary we have an old fashioned term for people like you, and that word is patriot.

I have some questions here that I would like for you to answer for the record. Thank you, Mr. Chairman.

Chairman Tower. Mr. Secretary, you have given us fine testimony. Your performance before this committee has been outstanding. I want to thank you for the job you have done.

I want to thank General Vessey for the job he has done and is doing. We, of course, look forward to cooperating with you during the course of consideration of the authorization bill.

Senator Exon. Mr. Chairman, could I just say one thing?

I also agree that he is a patriot.

I think the record should be left open in case you want to add to that, Mr. Secretary.

[Questions submitted with answers supplied follow:]

Questions Submitted by Senator Strom Thurmond

C-17 R&D PROGRAM

Senator Thurmond. Mr. Secretary, we have a serious shortfall in both aircraft and sealift necessary to meet our commitments. I believe the C-17 program is extremely important. Would you outline the progress made in this program?

Secretary Weinberger. Progress since initiation of the limited R&D contract for the C-17 in July 1982 is summarized below:

1. Wind tunnel tests using four different models have been conducted to verify performance, flying qualities, and structural loads at high and low speeds, takeoff and landing. Good progress has been made in this work, and more than 90 percent of all wind tunnel testing is expected to be completed by the end of fiscal year 1984. Test results have confirmed predicted performance.

2. Thrust reverser development tests using two scale models of the thrust reversers for the engine fan thrust and engine core thrust have provided data for design of the full-scale thrust reversers.

3. Full-scale mockups of the C-17 fuselage, including cargo compartment, have been completed for Army and Air Force preliminary evaluation of loadability of all critical Army equipment. A 20-foot cargo floor section has also been built.

4. A major effort has been initiated to provide a computerized data base for reliability, maintainability and availability predictions for all significant equipments and subsystems to facilitate control and track of C-17 system characterstics in these areas in the hardware design phase.

5. Other work accomplished to date includes:

Re-appraisal of the C-17 avionics system has been initiated to take advantage of improvements in system capability and reduced acquisition and maintenance costs obtainable from recent advancements in avionics technology.

Development of a unique avionics cooling system to enhance avionics durability.

Development and collection of structural design criteria, to facilitate orderly start of the detail hardware design stage.

Implementation of a logistics support analysis for efficient support of the aircraft in service.

Review of all aircraft systems and structures has been conducted to determine their capability to meet operational needs, safety requirements and goals for reliability, maintainability and cost. This review has identified many improvements over the systems originally proposed.

STRATEGIC DEFENSE INITIATIVE CHANGES

Senator **THURMOND**. Mr. Secretary, in light of the disclosure of Soviet violations of various treaty commitments, what changes would you recommend in our strategic defense initiative?

Secretary **WEINBERGER**. Our plan for implementation of President Reagan's Strategic Defense Initiative was prepared with due consideration given to all Soviet activities. The Strategic Defense Initiative program contained in the fiscal year 1985 budget request is appropriate. I do not recommend any change to it.

CINC'S CONCERNS

Senator **THURMOND**. General Vessey, when the Commanders of the Unified Commands came before the Defense Resources Board, what were their chief concerns?

General **VESSEY**. The commanders in chief emphasized their need to improve and maintain the warfighting capabilities of the operating forces. These concerns include readiness, training, sustainability and essential modernization. At the heart of improving operational effectiveness is the quality and preparedness of the people. More specifically, their priorities included: improving the capabilities of our present forces, including the infrastructure and connectivity, strategic and theater mobility of forces; sustainability of forces during conflict; cooperative efforts with friends and allies and personnel initiatives to maintain the quality of our fighting forces.

SPECIAL OPERATIONS FORCES

Senator **THURMOND**. What were their recommendations in regards to special operations forces?

General **VESSEY**. The commanders in chief did not mention special operations forces (SOF) as one of their major concerns. Some did, however, address this subject in relatively general terms. They called for continued emphasis on the need for SOF specific equipment, adequately trained personnel, supporting air assets and integration of SOF units into the command structure.

SOVIET ARMS CONTROL VIOLATIONS AND CHEMICAL DETERRENCE

Senator **THURMOND**. Mr. Secretary, the Congress has consistently rejected approving funds for chemical weapons. The President's report on Soviet treaty violations makes obvious that willingness to utilize such weapons to their advantage. What are your recommendations for such weapons this year?

Secretary **WEINBERGER**. In fiscal year 1985, we are requesting funds for partial facilitization and for long-lead munitions parts. Before any munitions could be completed, Congress would have to provide additional funds for facilities and for the final assembly process. Our budget request is programmatically similar to the provisions of the fiscal year 1984 Defense Authorization Act.

Soviet treaty violations in the chemical area have not caused us to turn away from our chemical arms control objectives. However, they have made clear the need for effective verification and compliance measures and for an effective deterrent.

The overriding U.S. chemical warfare objective is a complete, verifiable ban on the development, production, and stockpiling of chemical weapons. That is to totally eliminate this class of weapons from the world's arsenals. We in DOD fully support this national objective. There are few, if any, enthusiasts for chemical weapons in the US military. Chemical weapons never have been and never will be central to our military power. Rather, since World War I, they have existed for the purpose of deterring others from using chemical weapons against us or our allies. Further, under no circumstances will we use chemical weapons first It is testimony to our deterrent policy that since World War I chemical weapons have not been used against U.S. forces. A complete, verifiable chemical weapons ban is the DOD's preferred solution to the chemical problem. The military, those who might have to face the Soviet chemical threat in combat, are especially strong in their desire for a treaty, but it must be effective.

The DOD has been working closely with the Department of State and the Arms Control and Disarmament Agency to achieve a chemical ban. We have been actively involved in developing our policy and negotiating positions, have provided technical support, and last fall we hosted an international workshop on verification procedures at the major chemical depot at Tooele, Utah.

Unfortunately, our Soviet counterparts do not share our views on chemical weapons. Where we have restrained, they have expanded; where we have opended our chemical programs, they have maintained a shroud of secrecy; where we have actively sought a ban, they have obstructed progress; and where our forces have not fired a chemical round in anger since World War I, the overwhelming evidence is that the Soviets have used or sponsored the use of chemical and toxin weapons in Southeast Asia and Afghanistan.

We want a treaty very badly, but we cannot bury our heads in the sand and ignore Soviet capabilities and behavior. We have a moral obligation to the nation and to the men and women who bear its colors. We must modernize our deterrent capability—both the protective and the retaliatory components. Not to do so can only increase our peril. The Soviets will find us ever willing to join them in laying down these arms, but they must find us also ever able to meet the threat they pose.

Questions Submitted by Senator Roger W. Jepsen

AN/SQR-19 TOWED ARRAY SONAR

Senator **Jepsen**. Mr. Secretary, in the defense appropriations bill for fiscal 1984, language was included which specifically prohibited the expenditure of funds for the AN/SQR-19 towed array sonar. Has this language caused the Department of Defense difficulties with its efforts to improve NATO defense against the Soviet submarine threat?

Have Spain and Canada formally protested this congressional action?

Secretary **Weinberger**. Yes, it has caused difficulties, and both Canada and Spain have made strenuous protests. Both nations would suffer distinct delays or other complications in their shipbuilding programs if the prohibition were to continue in effect. I might also add that the prohibition caused a severe impact on our foreign military sales operations since we already had a signed contract upon which the Spaniards made payments. If the legislation is not modified, we will have to repay this money and the U.S. Navy will incur significant extra contract costs as a result. Fortunately, as a result of further consultations between the Navy and the Congress, I believe there are reassuring indications that relief from this prohibition will be forthcoming.

Questions Submitted by Senator Sam Nunn

ALLIED TROOP STRENGTHS

Senator **Nunn**. Secretary Weinberger, the fiscal year 1984 Defense Authorization Act specified that the level of U.S. troops in Western Europe could not rise if the level of other allied troops stationed in West Germany went down.

What is the current situation with regard to this:

Secretary **Weinberger**. I raised this matter with our allies at the DPC Meeting of NATO Defense Ministers in December, 1983. We have made clear our concern that the allies maintain their troop strengths in the FRG and are currently seeking to clarify allied plans. I would agree with the principle that increases in U.S. troop levels should not be used to take up slack left by Allied reductions. At the same time, however, I believe that U.S. troop strengths in Europe should not be conditioned on allied troop levels in the FRG. The United States should rather have the flexibility to adjust its troop levels as the threat requires. The condition on allied troop strengths, moreover, is a poor measure of allied burdensharing, since it fixes on but one of a host of measures of Allied effort and defense capabilities.

Senator NUNN. Do any of our allies have plans to reduce the number of their troops in West Germany in the coming year?

Secretary WEINBERGER. We are currently seeking to clarify allied plans.

EUROPEAN TROOP STRENGTH

Senator NUNN. Does the fiscal year 1985 budget include any increases in the number of U.S. troops stationed in Western Europe?

Secretary WEINBERGER. After an extensive review of our requirements in Europe, we concluded that we need 326,400 U.S. military personnel permanently stationed ashore in European NATO countries at the end of fiscal year 1985 (includes about 4,650 for the Ground Launched Cruise Missile (GLCM) program). This is an increase of 3,800 over the higher fiscal year 1984 conditional congressional ceiling of 322,600, but is 8,600 below the level at which we began the review. Included in this increase is an increase of about 3,300 for the Air Force, 400 for the Army and 100 for the Navy. About 2,050 of the Air Force increase in fiscal year 1985 is for GLCM. More detailed data on the increase is shown in the first year 1985 Defense Manpower Requirements Report.

ROLAND-PATRIOT

Senator NUNN. Secretary Weinberger, what will be the impact of the recently signed Roland-Patriot deal between the United States and West Germany on NATO's overall air defense capability?

Secretary WEINBERGER. This agreement represents a major step towards modernizing and strengthening NATO's overall air defense capability. The long-range all altitude Patriot will largely replace the older, high-altitude Nike Hercules in providing area air defense coverage to the Central Region while the Roland point air defense weapons will greatly enhance U.S. and German air base defense throughout the sector.

RELATIONS WITH WEST GERMANY

Senator NUNN. Would you evaluate the importance of this agreement in terms of our relations with West Germany and with other NATO countries?

Secretary WEINBERGER. The agreement clearly demonstrates how two close allies can work together and make accommodations in the mutual interest of improving NATO's conventional defense. It has helped strengthen U.S.-German relations and lends momentum to achieving the NATO objective of comprehensive modernization of our air defense capabilities in the Central Region. This joint project also illustrates to our NATO allies the United States commitment to the two-way street in arms procurement.

COST EFFECTIVE AIR DEFENSE IMPROVEMENTS

Senator NUNN. Was this the most cost-effective way to improve NATO air defenses, and if not, what would have been?

Secretary WEINBERGER. An effective air defense capability requires a combination of fighter aircraft, low-to-high altitude surface-to-air missile systems, anti-aircraft guns, plus passive defense measures such as aircraft shelters. The recently concluded agreement with Germany created a cost-effective way of improving the surface-to-air missile system portion of NATO's air defense umbrella. There are other cost-effective improvements we also need to take to upgrade the survivability of our tactical air forces in Europe (e.g. shelters for augmentation aircraft, prepositioned rapid runway repair kits, and earthen berms for blast protection around key airbase facilities at Colocated Operating Bases and Main Operating Bases). We are likewise pursuing programs to secure these needed improvements.

AIRLAND BATTLE DOCTRINE

Senator NUNN. Secretary Weinberger, what is the status of changes in conventional doctrine enumerated in Airland Battle concept and what effort is being made at the OSD level to integrate programs and doctrines?

Secretary WEINBERGER. The Army formalized the Airland Battle Concept as Army Doctrine in August of 1982 by publishing an updated version of their principal operations manual, FM 100–5, and is currently in the process of updating all of its subordinate "How to Fight" manuals and training publications to reflect the revised doctrine. The new doctrine has been included in service school instruction.

The Air Force has agreed to use Airland Battle doctrine in conjunction with its Aerospace Operational Doctrine as the basis for joint operations. In addition, in April the Army and Air Force signed a memorandum of understanding (MOU) in which they agreed to enhance a memorandum of understanding (MOU) in which they agreed to enhance their combined effectiveness in Airland Battle operations through joint efforts. Particular emphasis is to be placed on increased joint exercises and training. Other aspects of that MOU include efforts to enhance inter-service interface during planning and programing processes; increased dialogue on Airland Battle and related concepts; greater cooperation in the development and coordination of deep attacks/battlefield air interdiction programs; and greater cooperation in the development and coordination of airlift requirements to meet battlefield mobility needs.

Efforts in many of these areas are well underway and have resulted in several follow-on agreements that include the establishment of a joint working group that, since August of last year, has been engaged in a collaborative effort to define and reconcile Army and Air Force programs in this area with a view to achieving fully integrated fiscal year 1986 programs.

At OSD, my staff continues to review service programs from a cross service perspective, taking into consideration current and evolving doctrine and concepts. Where programs appear to be redundant or inconsistent they are reviewed by the Defense Resources Board. Where similar, or related, capabilities are required by more than one service, we have required that joint programs be established.

INCREASED RESERVE COMPONENT MISSIONS

Senator NUNN. Last year this committee directed the Defense Department to give serious consideration to transferring to the reserve components programed to be added to the active forces.

Do you agree that there are currently units and missions in the active forces which could be transferred to the Reserve Components without detracting from our overall military capability?

Secretary WEINBERGER. Each of the service staffs and the OSD staff have been examining that question in detail. As you know, we will submit a major report on that topic this month to the Senate Appropriations Committee, and copies will be provided to you. In brief, the answer to your question is that there may be appropriate transfers of the type you suggest and we are looking for them, but in general our active forces are sized for the missions that are required to be accomplished in peacetime and in the very first days of a crisis before our reserve forces can be mobilized. We have not identified any mission areas where broad transfers from the active to the Reserve Components in large scale would be appropriate.

Senator NUNN. What steps have been taken in the fiscal year 1985 budget to transfer units or missions from the active to the reserve forces?

Secretary WEINBERGER. Transfer of units and missions to the reserve forces takes place only if the warfighting capability we need can be provided by the reserve forces. This determination is the first and most important step in the decision process. If that wartime capability can be insured, the services must consider such things as cost, recruiting capacity, facilities, and whether the unit's peacetime workload can be accomplished by reserve members. Only after full consideration of all these factors can such determinations be made.

The Army will transfer 14 combat support units from the active component to the Reserve Components this year, while strengthening existing Reserve Component units. The surface Naval Reserve Force will receive modern frigates and a new mine-countermeasures ship. The Marine Corps is enhancing the artillery capability of existing reserve units and creating new reserve combat support units. The Selected Marine Corps Reserve will form a new CH53D helicopter squadron. The Air Reserve Force will continue to modernize and expand. For example, the Air Reserve Force will take on new missions in air base defense, medical support and civil engineering while introducing the F–16 aircraft and forming a C–5 squadron.

CHEMICAL WARFARE DETERRENCE

Senator **Nunn**. Mr. Secretary, last year the Congress again failed to approve the administration's request for production of binary chemical weapons. What is your program this year for retaliatory chemical weapons and how important is this for deterrence?

Secretary **Weinberger**. The fiscal year 1984 Defense Authorization Act provided a framework for a balance between resolve and restraint on the chemical weapons issue. It authorized production facilities and initial procurement of chemical munitions but prohibited the final assembly of any weapons until 1 October 1985 (fiscal year 1986). This put leverage on the arms control process by establishing a specific date beyond which our patience would not stretch. Further, it put teeth into the resolve by going forward with the necessary preparatory steps to reestablish a credible deterrent. On the restraint side, it provided ample time for the Soviets to demonstrate a willingness to achieve an effective treaty and required the President to certify that final assembly remained in the national interest after reviewing the situation as it would exist in 1985.

Our fiscal year 1985 binary funding proposal matches the programmatics with the intent of the fiscal year 1984 Authorization Act. We are requesting funds for partial facilitization and for long-lead munition parts. Before any munitions could be completed, Congress would have to provide additional funds for facilities and the final assembly process. With the additional funding in fiscal year 1986, the first binary chemical artillery projectile could be completed in the fall of 1986 and the first BIGEYE bomb could be completed in mid-1987.

Modernization of our chemical weapons capability is an essential element in reestablishing a credible chemical deterrent and in keeping the nuclear threshold as high as possible. Since World War I, this nation has maintained a stockpile of chemical weapons as a deterrent. Deterrence comes from the ability to impose on an enemy a similar environment to that he imposes on us with his chemical first strike; thus, taking away the advantage he hoped to gain from using chemicals. This policy has worked. Chemical weapons have not been used against our forces since 1918.

Unfortunately, our military capabilities no longer match our policy. The Soviets can impose a contaminated environment on us hundreds of kilometers into our vital rear areas. We can impose such an environment on them for a maximum of about 18 kilometers behind their front lines. Beyond that they can operate without the encumberances of chemical protection.

We now face an extremely dangerous imbalance in chemical capabilities that we must move forward toward resolving. Not to do so can only tempt the Soviets to use chemical weapons against us or our allies and leave us dependent on a nuclear response to deter use.

NUCLEAR THRESHOLD TOO LOW

Senator **Nunn**. Secretary Weinberger and General Vessey, General Rogers has been widely reported as saying that the nuclear threshold in Europe is too low and that we need to raise this threshold to improving the conventional warfighting in NATO.

Do you agree with General Rogers' position?

Secretary **Weinberger**. I agree that NATO's conventional defenses are not adequately strong. The result of an inadequate conventional posture is that undue reliance is placed on nuclear deterrence. We are working closely with our allies, of course, to strengthen NATO's conventional and nuclear forces to provide a full spectrum of deterrence, as called for in the alliance's agreed strategy of flexible response.

IMPROVING CONVENTIONAL CAPABILITY IN NATO

Senator **Nunn**. What specific programs can you point to in the fiscal year 1985 budget that will improve our conventional capability in NATO?

Secretary **Weinberger**. A large number of the programs in the fiscal year 1985 budget will directly improve our conventional capability in NATO. Many of our general purpose forces would deploy to Europe in a war there, and the modernization, readiness and sustainability improvements that are programed in this year's budget will significantly strengthen their overall capabilities for Europe, as well as other contingencies. Many specifics, of course, could be cited including new M–1 tanks, Bradley fighting vehicles, and F–16 fighters.

We also have several defense programs that apply directly and exclusively to our forces in Europe. Examples are the host nation support measures being undertaken with our allies, POMCUS, NATO infrastructure and U.S. military construction programs in Europe, NATO exercises and cooperative training, and NATO arms cooperation. Our programs in the area of "emerging technology" also are oriented to improving our forces in Europe for such missions as targeting of enemy second echelon forces. The nature and impact of these programs will be examined in the forthcoming Department of Defense report on the conventional military balance in Europe, which has been mandated by the Congress.

Senator **Nunn**. It is now well over a year since the end of the Assault Breaker Demonstration program suggested the feasibility of using ground-launched missiles against armored forces in the second echelon. The Department has had requests for joint programs, JTACMS, JSTARS last year and this year.

What has been the progress in the last year?

Secretary **Weinberger**. While the progress has been slower than anticipated or desired, some significant accomplishments have occurred. Within USDRE a single focal point, the Assistant Under Secretary of Defense for Conventional Initiatives, has been established to coordinate the many facets of these efforts. A joint service JTACMS program office has been established at the U.S. Army Missile Command (Micom) at Redstone Arsenal in Huntsville, Alabama with the Army designated as lead service. Complementary to this is the Joint STARS program office in existence within the Electronic Systems Division (ESD) at Hanscom AFB, Massachusetts with the Air Force as lead servce. The services have agreed on the JSTARS system specification, RFP and acquisition strategy for full scale development. The JSTARS RFP is ready for release as soon as the Air Force testbed issue is resolved. The JTACMS program is also proceeding. Both the Army and the Air Force are working toward a joint statement of requirements, which should be completed in time to release an RFP on the missile later this year. These actions reflect a commitment by the service to the joint programs.

Senator **Nunn**. Do we have Air Force and Army agreement on configuration of missiles and/or radar? If not, why not?

Secretary **Weinberger**. The Army and the Air Force have agreed on the requirements and specifications for JSTARS. The Air Force has developed standoff weapon requirements for the Tactical Air Force and the Strategic Air Command. Additionally, they are currently in the process of analyzing the results of a solicitation to industry for ideas on standoff systems. The industrial responses may result in a refinement of the Air Force position. The Army is finalizing their analysis on issues such as the range requirement and force structure implications. The services should be in a position to jointly resolve their JTACMS requirements commencing in late March 1984.

PROGRAM REDUCTIONS FROM LAST YEAR'S BUDGET AMOUNT

Senator **Nunn**. Secretary Weinberger, the fiscal year 1985 defense budget you are submitting today is $16.6 billion below the level for fiscal year 1985 that was contained in last year's budget. According to the Department of Defense press release, $4.4 billion of this reduction was for more favorable economic assumptions and $12.2 billion was for program reductions.

What specific programs were reduced to achieve this $12.2 billion in savings?

Secretary **Weinberger**. We reduced spare parts, missiles and vehicle procurement, classified programs, and construction programs intended to redress and upgrade the quality and capabilities of our facilities. In addition, the programmatic reduction in fiscal year 1985 resulting from the President's decisions in fiscal year 1984 on strategic initiatives was incorporated during this review.

1984 CONGRESSIONAL REDUCTIONS ADDED TO 1985

Senator **Nunn**. Conversely, the DOD press release indicated the fiscal year 1985 level of $305 billion was established to "recover some of the ground lost due to congressional action in fiscal year 1984."

How much of this year's budget—in budget authority and a percentage—is to make up for last year's congressional reductions?

Secretary **Weinberger**. About $1.1 billion is included in the fiscal year 1985 budget as a result of last year's congressional actions. We attempted to minimize the inclusion of such items except where we considered it essential to maintain the momentum accomplished thus far.

COOPERATION IN IDENTIFYING REDUCTIONS IN DEFENSE

Senator NUNN. Secretary Weinberger, I think you realize that there is a very good chance that, despite all the efforts of this administration, and despite the higher level that some of us may support, Congress will probably adopt a budget resolution for fiscal year 1985 for lower defense spending than requested by the President.

If this happens and this committee is forced to make reductions to the fiscal year 1985 defense budget to comply with the congressional budget resolution, will you cooperate with this committee in establishing priorities to make these reductions?

Secretary WEINBERGER. The defense request included in the President's budget represents the culmination of nearly a year's intensive review with the Department of Defense. We have defined the requirements essential to our national security objectives. We have included in our budget those programs necessary to ensure achievement of our goals. As Secretary of Defense, it is my obligation to present to you a budget that accurately reflects and supports our national security needs. Applying costs to these requirements is the last step in our program evolution. To assume or recognize that we can subsequently restructure our needs to fit within an arbitrary fiscal constraint would be for me to ignore the responsibilities of my office. This cannot be done without sacrificing programs or efforts that have been determined essential to our defense posture. To ask my cooperation in the dismantling of a carefully constructed defense program is to ask me to abandon my role as Secretary of Defense. I do intend to cooperate with you in every way I can to defend the content of the fiscal year 1985 program and to minimize congressional reductions to defense requirements.

DEFENDING AGAINST NUCLEAR ATTACK

Senator NUNN. Secretary Weinberger, the administration has articulated the viewpoint that perhaps we ought to be seeking ways to defend our Nation against nuclear attack, rather than continuing to rely on the philosophy of mutual assured destruction as a deterrent. This seems to be the philosophy behind the administration's "Star Wars" initiative.

Would not an effective defense against ballistic missiles be seen by the Soviets as posing a profound offensive threat to them, inasmuch as it would free us to use our own offensive capabilities without fear of retaliation?

Secretary WEINBERGER. The ultimate goal of the Strategic Defensive Initiative program is to protect the United States and our people, not to threaten the Soviets. The President's decision to explore the possibility of an effective defense against ballistic missiles was motivated in part by a desire to move away from today's situation where the threat of retaliation is our only means of deterring nuclear war. The offense-dominant strategy of today has not produced stability, but instead has led to the continued expansion of strategic offensive nuclear arsenals. Highly effective defenses would substantially decrease the utility of ballistic missiles, and thus create incentives to reduce offensive nuclear stockpiles.

CUTBACK ON NEAR-TERM BMD

Senator NUNN. To what extent, in orienting our efforts toward a system to become operational "around the end of the century," have we cut back on or reoriented systems we might wish to have in the near-term in order to forestall, or respond to, a Soviet ABM breakout?

Secretary WEINBERGER. At the time the President announced the Strategic Defense Initiative (SDI), the BMD program was structured to support the defense of ICBM's with an IOC [deleted] after a decision to deploy [deleted]. A decision to deploy would have resulted in a two-layered defense using nuclear-tipped interceptors and relying primarily on radar as a source of sensor data.

Under the SDI the earliest IOC for defense of land-based ICBM's would be [deleted]. The system that could begin to be deployed at that time would be a "multi-layer" system (a portion of a "full" SDI defense system) that would be more capable than the previously envisioned ICBM-only defense [deleted]. This "multi-layer" defense is planned to be nonnuclear, a definite advantage in many respects.

COMMITMENT OF U.S. FORCES

Senator **Nunn**. General Vessey, recent military actions in Central America, Grenada, and Lebanon have led some to suggest that our military forces are being stretched too thin. In your opinion, General Vessey, if we were forced to quickly reinforce our Marine contingent and deal with a similar crisis elsewhere in the third world, could we respond without degrading our NATO commitment?

General **Vessey**. Yes, we can. Substantial general purpose forces are available to respond to regional contingencies or crises not directly involving the U.S.S.R. We have demonstrated this during the past several months without canceling any major exercises or degrading major force deployments overseas. The actual commitment of forces to such a contingency does not automatically reduce force levels for the defense of NATO. A portion of our conventional force structure is not committed to NATO. Additionally, it is recognized that the Soviets would require extensive preparation prior to an invasion of Europe and U.S. intelligence could provide some warning. Based on this warning and a timely decision by the National Command Authorities, we could redeploy forces from other regional conflict areas to Europe.

MUNITIONS SUSTAINABILITY

Senator **Nunn**. Secretary Weinberger, I note in your statement that by the end of the decade munitions sustainability will be double that of 1981. What about our NATO allies? Are we buying munitions for the Europeans or what?

Secretary **Weinbeerger**. At the end of the fiscal year 1981 funded delivery period, we had [deleted] of munitions supply measured against our estimated consumption. Our current 5-year plan contains funding to build that stockpile to [deleted] by 1990. This is a very austere posture when you consider that the Warsaw Pact is projected to have about [deleted]. While our NATO allies are projected to have only about [deleted] by 1989, we must not be satisfied with an unacceptable support posture simply because our Allies are not programing as fast as we would have them program. We have always been the leader in NATO and must continue to demonstrate, with our resources as well as our rhetoric, that we believe in raising the nuclear threshold by establishing a credible conventional defense—a defense that costs much more than we are asking for in the fiscal year 1985 budget.

We are not buying munitions for any European nation.

NATO SUSTAINABILITY AND REINFORCEMENT

Senator **Nunn**. General Vessey, if the Europeans are as short as General Rogers has stated, one to two weeks, what is the relevance of our ten divisions in ten days to a sensible defense strategy? If we are going to have to go nuclear or surrender, why would we want more ground forces there?

General **Vessey**. Since analysis of the NATO sustainability problem is very much a function of scenarios and rates of consumption, I would be hesitant to speak in terms of absolute numbers of days before substainability becomes a controlling factor. Having said that, it is a fact that NATO Force Goals have called for adequate war reserve stocks. It is also generally accepted that NATO has collectively failed to meet these goals. I would absolve no NATO nation from culpability on the sustainability issue, although—at least in recent years—the U.S. has had the best record in eliminating stock level deficiencies. My colleagues of the NATO Military Committee have joined General Rogers in repeatedly entreating the NATO political authorities to improve the sustainability posture of national forces earmarked for NATO. Regrettably, in most NATO capitals sustainability measures are often ignored in pursuit of more exotic "force multiplier" schemes or other priorities, and our sustainability progress suffers.

On the question of the advisability of the 10–10 reinforcement scheme, the implication that NATO's sustainability situation renders the policy of reinforcement unwise is perhaps circular reasoning. By most estimates, mobilization and reinforcement of Europe should commence prior to the actual outbreak of hostilities. The acts of mobilization and reinforcement are deterrents in their own right, but will also do much to improve the peacetime sustainability situation—and particularly so with respect to NATO's Central Region. If we are sincere about avoiding an early nuclear decision or surrender, we should emphasize more reinforcement capability rather than less. Even if one views NATO's current conventional posture as little more than an extended trip wire—and I do not, a major retrenchment in U.S. ground reinforcements for NATO would leave little recourse other than the nuclear alternative. That is a cure that is worse than the disease.

CONVENTIONAL DEFENSES OF NATO

Senator NUNN. Secretary Weinberger, I want to compliment you on your continuing efforts to enhance the conventional defenses of NATO, particularly your thrust on emerging technologies. You portrayed the potential of these new technologies and expressed the depth of U.S. commitment to them in your discussions with NATO defense ministers in Brussels in December 1982, and again in December 1983.

Do you remain committed to this approach, and in what ways do the service budgets you are submitting adequately reflect this commitment, for example in relation to such weapons systems as JTACMS and JSTARS?

Secretary WEINBERGER. The Department remains committed to the application of new technology to conventional weapon systems in order to reduce our dependence on battlefield nuclear weapons. We are working within our own forces to acquire the technology expeditiously while integrating it into a true operational capability. Simultaneously, we are working to introduce these capabilities into the forces of our European allies within the overall umbrella of our emerging technologies dialogue. Furthermore, the President's budget includes a major increase in our request for JTACMS and JSTARS over last year. We intend to field a JTACMS and JSTARS capability before the end of the decade and have funded the programs adequately to meet this objective.

DEFENSE ORGANIZATION

Senator NUNN. General Vessey, you have been Chairman of the Joint Chiefs of Staff for nearly 2 years now. From this perspective, you have undoubtedly become aware of shortcomings in the organization of the Department of Defense. What organizational changes would you recommend to improve the effectiveness of the Department?

General VESSEY. I can speak best for how the Joint Chiefs of Staff go about their business under the law. The Joint Chiefs have looked at the law and the responsibilities laid out for them there. Those responsibilities are the right ones and we are working with the Secretary to seek better ways for us to fulfill our duties. We have made a number of recommendations to the Secretary, some of which require changes to the law. The recommended changes to the law were sent to the Congress in April 1983.

Other improvements require no changes to the law and we are acting on those now. Improving our war plans and the support to and the effectiveness of the Commanders in Chief of the Unified and Specified Commands are two examples. I've already outlined these and many others in testimony before this committee on 4 October 1983. Although the legislation we requested has not yet been enacted, I can say that the changes the Joint Chiefs have set in motion have improved our effectiveness.

We have a great American penchant for making organizational changes when we think we ought to be doing the job better. I have no reluctance to suggest organizational changes if they seem to be needed but I am not one who believes that organizational changes are necessarily the only way or the right way to improve efficiency. The present organization of the Department of Defense has evolved through the years and the major changes made as a result of the National Security Act of 1947 and the Department of Defense Reorganization Act of 1958 moved the Department in the right direction. There will always be plenty of room for improvement within an organization as large as the Department of Defense for our nation. What works well today will not work well tomorrow and some future Secretary will have to attend to that. What is not working as well as it might today is getting management attention and it will be better for the years ahead. I believe that the next major look by the Congress and the executive branch at how the nation does its defense business ought to look at the relationship between the Congress and the Defense Department. The total government spends far too much time planning for the future and not enough time supervising the execution of existing programs. I believe the nation would be better served with two-year authorizations and two-year defense appropriations. We could probably get by with about half as much time devoted to preparation of the budget by both the Department and the Congress and we in the Department could spend more time supervising the execution of the budget. Such a system would also add greatly to program stability and I believe would probably save money for the taxpayer.

CHAIRMAN'S AUTHORITY

Senator NUNN. In particular, do you believe that the authority of the Chairman of the JCS should be enhanced in any way?

General VESSEY. When the Joint Chiefs examined their duties under the law, we recommended only one change in the duties of the Chairman. That change was to place him in the chain of command. That change was intended to make explicit the Chairman's function as a link between the Secretary of Defense and the Unified and Specified commands, an arrangement which works well in practice today, but needs to be codified. Other than that point, I believe the Chairman has all the authority he needs to do his job.

JOINT STAFF STATURE

Senator NUNN. Would you recommend any changes aimed at increasing the influence or stature of the Joint Staff?

General VESSEY. First, let me say that I do not view the Joint Staff as lacking stature or influence. It is composed of hard working, dedicated professionals with whom I am proud to serve. There is always room for functional improvements, however, which I believe would enhance the staff's ability to support the Joint Chiefs of Staff and thereby increase its stature and influence. With regard to title 10, I recommend passage of those provisions of pending legislation which remove the restrictions on the size of the Joint Staff and the tenure of its officers, i.e. eliminate the 400 officer "cap" and extend tour lengths from 3 to 4 years. That would give the Joint Staff growing room and allow us to retain our experts a year longer. I also believe the Joint Staff needs to expand its resource analysis capability to support a stronger Joint Chiefs of Staff role in the programing and budgeting process. A new Joint Staff agency is being formed with that in mind. It will also help me form independent judgements concerning warfighting impacts of program and budget proposals in the Defense Resources Board.

Senator NUNN. Secretary Weinberger, on page 39 of your posture statement I read the following about Lebanon:

"In Lebanon we are committed to helping that country's government train and equip a force that can be used to assume control over Lebanese territory. Our goal in Lebanon remains the withdrawal of foreign forces, and the development of a strong central government"

The question I have is this: Would the administration consider removing our troops once we have trained and equipped a sufficient portion of the Lebanese Army, or will our forces remain in Lebanon until the latter three goals are accomplished—the withdrawal of Syria and Israel, the reconciliation of the various political factions, and the development of a strong central government?

Let me simply say that if we intend to wait until all those goals are accomplished before removing our forces, you had better begin preparing another dozen congressional resolutions.

Secretary WEINBERGER. Our position has been all along that we seek the withdrawal of foreign forces, the reconciliation of the various communities in Lebanon, and the establishment of a broadly-based central government, fully sovereign throughout the territory of Lebanon. These, however, are long-term policy objectives. They have never been regarded as prerequisites to the removal of the U.S. element of the Multinational Force.

SALVADORAN TRAINING PROGRAM

Senator NUNN. General Vessey, how would you rate the success of our military training program in El Salvador?

General VESSEY. The training U.S personnel are providing the Salvadorans has proven effective in preparing them for combat. The training ranges from basic training at the National Military Training Center in La Union, small unit operations at the RMTC, technical training in aircraft maintenance, tactical intelligence, logistics communications, artillery and medical operations, officer training in the U.S. and now we are undertaking the training of headquarters staffs. The result is that field commanders and combat soldiers are more capable and more aggressive. The General Staff is operating 24 hours a day with a Joint Tactical Center where all major operations are planned and coordinated. There is improved communications and intelligence collection.

The problem is, however, that our unit training program has only reached a fraction of the force. We could have done much better, but insufficient security assistance funding, provided in a piecemeal fashion and the very restrictive limit on military personnel presence in El Salvador, have seriously hampered our ability to train. We should also point out that in addition to the training constraints, funding constraints affect our ability to provide effective equipment (force multiplier) to enhance mobility, timely accurate fire support, and to assist in long-term planning to equip and provision an expanding force structure for sustained military operations.

Senator NUNN. Do you believe that we are training the El Salvadoran officer corps in the tactics and operations that are best suited to their situation and capabilities? Or are we training them as we would a similar U.S. force?

General VESSEY. We are training the Salvadoran officer corps in the tactics and operations that are best suited to their situation and capabilities. We started this training with the Officer Candidates trained here in the United States; we also train the Salvadorans in these tactics at the Regional Military Training Center (RMTC) and in El Salvador by U.S. Operations and Planning Training Teams. But the paucity of U.S. aid and the uneven starts and stops of our material and economic assistance have constrained operations and let slip the initiative to the guerrillas.

Senator NUNN. Are we providing any training to enlisted men in the specific use of weapons such as mortars, rifles, and the like? Should more of this be done?

General VESSEY. We are providing the training you described at the National Military Training Center in La Union Department and at the RMTC in Honduras. We are doing as much of this kind of training as we can do within the limited security assistance funding program now available. U.S. military presence constraints in El Salvador (55-man limit) have also limited our ability to impart sufficient training to the Salvadoran armed forces.

The course of instruction at the RMTC includes weapons training to include rifle marksmanship and crew served weapons such as mortars and recoiless rifles as well as battefield tactics. Squad and platoon tactics and then company and battalion operations follow when students master the individual skills.

We are planning to bring the officers and NCO's to the RMTC 2 weeks early to prepare them for the training and leading their units. As demonstrated during the Belloso battalion training program at Fort Bragg, N.C. in 1981, this early preparation maximizes the benefits of U.S. training for the entire unit and in effect trains Salvadorans to be the trainers and leaders of their armed forces. We also have trained and are continuing to train Salvadoran instructors for their National Military Training Center and instructors for Salvadoran Military Training Teams. By instructing the Salvadoran officers and NCO's in individual skills as well as unit training and leadership, we maximize the effectiveness and exposure for U.S. training in El Salvador.

B-52 ALCM PROGRAMS

Senator NUNN. Mr. Secretary, I was interested in your chart entitled "Significant Accomplishments of the Reagan administration" and some of the text in your opening statement. For example, you listed, "we have begun deployment of the B-52 bomber fleet, for cruise missile capability."

Did you start or accelerate the air launched cruise missile program for the B-52?

Senator WEINBERGER. The first operational deployment of ALCM occurred in December 1982 under the current administration. This year we will deploy the fourth operational ALCM-equipped B-52 squadron. The ALCM program itself, however, was started during the Carter administration. We have not accelerated the ALCM program, although last year we terminated production of the current ALCM in favor of the advanced cruise missile to improve range and survivability of our cruise missile force.

INITIATION OF TRIDENT PROGRAM

Senator NUNN. For example, you listed "we have deployed three Trident class submarines and funded eight more through fiscal year 1984".

Did you start those first three Tridents, and didn't you actually reduce the Trident building program of the previous administration?

Secretary WEINBERGER. The chronology of Trident (or SSBN 726) class fleet ballistic missile submarine authorization/procurement is summarized as follows:

SSBN hull No.:	*Fiscal year authorization*
726	1974
727	1975
728	1975
729	1976
730	1977
731	1978
732	1978
733	1980
734	1981
735	1983
736	1984

Inasmuch as the first budget submitted by the Reagan administration was the fiscal year 1983 budget, which funded the tenth Trident hull, previous administrations were responsible for the procurement of the first nine ships of this class. Specifically the Carter administration had budget submission responsibility for the period fiscal year 1979 through 1982, when two Trident hulls were funded. We plan to continue procurement at the rate of one hull per year; and, if this program is continued through fiscal year 1986, the building rate of Tridents during this administration will actually be double that of the previous (Carter) administration.

STRATEGIC PROGRAMS

Senator NUNN. For example, you stated on page 12, "Dangerous obsolescence threatened all three legs of our strategic triad in 1980, threatening the stability of deterrence."

Do you consider the Trident submarine and Trident I missile to be obsolescent? Were not both of these programs fully under way in 1980?

Secretary WEINBERGER. Certainly the Trident submarine and the Trident I missile are not obsolescent. But in 1980, we faced the prospect of block obsolesence of the Poseidon submarine force, including those equipped with the Trident I missile, in the 1990s. And we had not yet taken delivery of a single Trident submarine due to poor contract performance and contract disputes. We have succeeded in correcting these problems, have stabilized Trident submarine procurement at one per year, and are now taking deliveries of Trident submarines earlier than planned under revised schedules.

DEPLOYABLE BATTLE FORCE OF 525 SHIPS

Senator NUNN. For example, you cite the increase in the number of deployable battle force ships has grown from 479 to 525, or an increase of 46 ships. How many of those 46 ships were funded prior to the Regan administration?

Secretary WEINBEGER. The total of 525 ships—yielding the stated increase of 46 ships—will not be achieved until the end of fiscal year 1984. Of this number, five were funded during Reagan administration. TAFS–8 and –9 were delivered 1 March 1982, BB–62 was delivered 17 December 1982, TAFS–10 was delivered 13 December 1983, and BB–61 will be delivered in April 1984.

CREDIT FOR DEFENSE IMPROVEMENTS

Senator NUNN. The point is this: There are a number of improvements this administration deserves credit for, such as the improved personnel situation, but the Nixon, Ford and Carter administrations deserve some credit as well. All that is bad did not begin with them and all that is good did not begin with you.

Secretary WEINBERGER. Senator, I do not wish to imply that there was no progress at all under previous administrations, for surely the Trident submarine and cruise missiles are just two examples of earlier development efforts that are now coming to fruition. Nonetheless, it is true, and generally recognized, that there has been a dramatic change in our national agenda under this administration. The emphasis placed upon revitalizing our armed forces, as well as the public and congressional support for doing so, demonstrate the acceptance of our belief that our national defense needed immediate and considerable attention.

MILITARY RETIREMENT SYSTEM

Senator NUNN. Secretary Weinberger, for the last year Defense Department officials have opposed any change to the military retirement system on the grounds that military retirement would be one of the subjects reviewed by the Fifth Quadrennial Review of Military Compensation. I understand the QRMC has completed their report.

Does this report make any recommendations to change the military retirement system?

Secretary WEINBERGER. The Fifth Quadrennial Review has completed its analysis of the military retirement system in relation to its contribution to our defense effort. Presently, the results of that analysis are being reviewed by the Joint Chief of Staff and the Military Departments. When that is completed, we will be in a better position to make appropriate recommendations to the President on the necessary changes to enhance the retirement system as a personnel management tool and as a major compensation element.

Senator NUNN. Do you favor any changes to the military retirement system? What types of changes do you favor?

Secretary WEINBERGER. As we have consistently stated, we believe that any change to the military retirement system must be based on our ability to meet our defense requirements. When the President directed us to conduct the 5th QRMC, he specifically charged us to evaluate that system in relation to its contribution to our defense objectives. It is vitally important to understand the impact of changes upon the active force and our ability to attract, retain, and retire members so that the right age, skill, and leadership mix can be maintained. We are now ensuring that proposals for change be assessed against those criteria.

Senator NUNN. Will the Defense Department be submitting any comprehensive legislation to the Congress this year to reform the military retirement system?

Secretary WEINBERGER. When our review is compelted and if revisions are necessary to strength our defense position, we will not hesitate to ask the Congress to consider and enact changes.

RETIREMENT REFORM

Senator NUNN. General Vessey, you stated in an interview over a year ago that the "changing nature of warfare may justify changes in military retirement."

What changes to the current military retirement system would you favor?

General VESSEY. I don't believe I favor any changes to the military retirement system right now. The retirement system as a part of the total system of pay and emoluments seems to be attracting the right sort of people in the right numbers for this country to keep a ready military force.

What I meant by that remark is that for years and years the military service has been considered a young person's business. Service in some of the combat branches required extraordinary physical exertion over long periods of time. The nation has always wanted a ready force—physically, mentally, and spiritually ready to do what the nation wants it to do. Being in the fighting part of the military services, and after all that is the important part of military service, has been much like the case of boxers and football players—the people are wanted in their best years. Several things are now happening which may change our outlook in the future. First, people are living longer and staying healthier and capable of physical exertion over longer periods of their lives. Second, modern battle is becoming more and more equipment intensive. The combination of longer-lived healthy people with modern military equipment may permit us to see older people doing what was once considered the business of young people.

For the present time, the system we have seems to be producing the readiness we need. In the years ahead we may be able to make come changes but the changes should be considered in light of the tntire system of pay and emoluments and its impact on the readiness of the force.

SOVIET VIOLATIONS OF ARMS CONTROL OBLIGATIONS

Senator NUNN. Secretary Weinberger, the administration has charged the Soviet Union with non-compliance with aspects of the BWC, SALT II, the ABM Treaty and others. I assume you concur in the findings?

Secretary WEINBERGER. Yes, I do concur.

Senator Nunn. Can you explain what additional measures you are proposing in this budget to deal with non-compliance?

Secretary Weinberger. The budget seeks to rectify the growing military imbalance favorable to the Soviet Union. Insofar as this imbalance was made possible, in part, by Soviet violations, the budget also responds, in part, to these violations. However, one cannot point to a particular line item as a specific response to a given violation.

The main implications of Soviet violations will be in the long-term. For example, it will depend on whether the construction of the Krasnoyarsk radar will lead to a future breakout from the ABM Treaty. Therefore, we are currently examining long-term options for an appropriate response to the Soviet violations. Some of our options include military programs and increased intelligence resources which, if chosen, would be included in future budgets.

Senator Nunn. Since your strategic modernization program dates from the beginning of this administration, this would seem to suggest you were persuaded of these violations way back in 1981. Why did you not report these earlier? Why did the Senate have to demand an accounting?

Secretary Weinberger. The Reagan administration has always been concerned with the expanding pattern of Soviet actions in violation or possible violation of their arms control obligations. We studied all actions with painstaking thoroughness. This was a time-consuming process. We used the procedures prescribed in the treaties for resolution of compliance questions. We pursued our concerns with the Soviets in the SCC in Geneva and through diplomatic channels. In all instances, the Soviets refused to address our concerns in a way that would resolve them. In particular, the SCC has been singularly unsuccessful. Only those issues in the 1970s where Soviet actions were finally accepted as legal by the U.S. were disposed of at the SCC and counted as another SCC "success."

In two cases, Soviet actions were especially clear-cut, and the United States went public at an early date. In late 1981, the United States charged the Soviets with failure to act in conformity with the Helsinki Final Act when they failed to give proper pre-notification of ZAPAD–81. In 1982, the President publicly charged the Soviets and their allies with violations of the Geneva Protocol of 1925, related rules of international law, and the 1972 Biological Weapons Convention in Laos, Kampuchea, and Afghanistan.

In the case of the Krasnoyarsk radar and the SS–X–25, evidence of Soviet violations was received in 1983. Hence three of the seven compliance issues in the President's report did not exist in 1981.

Consequently, the record shows that the Reagan administration has not been silent on Soviet violations prior to submission of the President's Report to Congress.

SALT VIOLATIONS

Senator Nunn. General Vessey, what changes in current military programs have the Joint Chiefs proposed to deal with these violations?

General Vessey. The Joint Chiefs of Staff use the National Intelligence Estimate (NIE) to set forth the military threat and this threat was one of the primary inputs in developing the Defense Program. Soviet confirmed and probable noncompliance activities fall within the predicted Soviet military developments in the NIE. Thus, the increased risk posed by Soviet actions involving development of the SS–X–25, possible SS–16 deployments, encryption, testing above 150kt, failure to provide exercise notification, violation of the Biological Warfare Convention, and ABM developments, have already been taken into account during the development of the Defense Program. We have, therefore, proposed no changes to current military programs to deal with present Soviet noncompliance activities. Although there is not currently an unacceptable risk, Soviet actions require continued monitoring, especially in the areas of CBW and ABM's, and will certainly be considered in evaluations of the Defense program.

Questions Submitted by Senator Carl Levin

SOVIET MILITARY SPENDING

Senator Levin. Secretary Weinberger, this administration has always touted Soviet defense spending totals as the reason why the United States should spend the inordinate amounts for defense it has proposed each year since it took office. For example, in your first budget appearance in 1981, you pointed to the Soviet defense budget and said it was growing at a three percent annual rate after inflation was excluded.

As late as 1982, Defense Intelligence Agency and Central Intelligence Agency witnesses were claiming that Soviet defense spending was growing at an annual real rate of four percent. However, is it not true that late last year the CIA admitted it had overestimated the amount of annual real growth in the Soviet defense budget during the 5 years between 1977 to 1981?

Secretary WEINBERGER. In late 1982 CIA reported that Soviet defense spending had grown at a rate of about 2 percent per year since 1976. CIA had previously estimated that the long-term growth rate of Soviet military spending was 4 percent per year in rubles, 3 percent when measured in dollars. But because of the high level Soviet military programs have already reached—in most categories well above U.S. levels—the new estimate does not change near-term prospects very much.

The Soviet military buildup I have described to you is something that has taken place over a long period of time, beginning in the late 1950's. For two decades, Soviet military programs steadily expanded while U.S. military programs fluctuated but did not really sustain any growth until the late 1970's.

I have always stressed the importance of comparing Soviet and U.S. military investment programs—that is, the weapons procurement, military construction, and RDT&E programs that create a long-lived stock of military assets. The military balance is shaped not so much by this year's military spending as by the stock of military assets accumulated over the past 10 or 20 years of military investments. So the results of our being greatly out-invested in the 1970's are still with us.

Obviously, we don't plan our budget to match the Soviets, for one year or over time. But when we look at the missions of our forces, and the balance of forces relevant to those missions, we see the tangible effects of the prolonged imbalance of military investment.

Senator LEVIN. According to the CIA, while the dollar costs of Soviet defense activities grew during the early to mid-1970's at an annual average rate of four percent, growth continued at a rate of only about two percent in the six-year period 1976 to 1981, a 50 percent reduction in rate?

Secretary WEINBERGER. That is the trend CIA has reported. For the longer run, of course, any slowing down of the growth in Soviet military programs would be good news—particularly if the trend led to a leveling off, or better yet, a decline in Soviet military programs. But there are three developments suggesting that Soviet military programs—far from leveling off—could increase more rapidly again in the years ahead:

One, Soviet military research and development programs have continued their rapid expansion.

Two, Soviet weapons production facilities have continued to expand.

Three, a number of sophisticated, expensive Soviet weapons under development appear to be nearing deployment.

Senator LEVIN. Also, it is not true that a new NATO study has just concluded that Soviet defense spending between 1976 and 1982 grew only at an annual rate, excluding inflation, of about 2.5 percent?

Secretary WEINBERGER. The NATO study is in general agreement with CIA, and is based on some of the same information CIA uses.

Senator LEVIN. Every year we are treated to statements by the administration that the Soviets are outproducing us in almost every category of military hardware and that that is why these huge budget increases are needed.

Is it not true that those comparisons are misleading, since our allies' production rates are excluded from the comparisons and, once they are included, the production gap is far less fearsome?

Secretary WEINBERGER. The comparison of production rates of the U.S. and U.S.S.R. is but one of several indicators which are used to compare U.S. and Soviet military investment. The Soviets are and have been outproducing the United States in almost all categories of military hardware. It is true that when the production rates of our, and their, allies are taken into account the production gap is narrowed. However, during the period 1974–1983 NATO outproduced the Warsaw Pact only in the areas of Major Surface Combatants, Attack Submarines and antiaircraft artillery. In the case of attack submarines, production for use by NATO forces was less (due to third country deliveries) than what the Warsaw Pact produced for its forces. The "production gap" is a fact and is the result of the sustained, pervasive Soviet investment in military hardware over the past twenty years.

Senator LEVIN. Is it not also true that the administration rarely highlights on its charts those categories in which we and our allies outproduce the Soviets and their allies?

Secretary WEINBERGER. We include representative major weapons categories on this chart. Note that chart 1A4 on Page 23 of my Annual Defense Report does indicate two areas (major surface warships and atack submarines) in which NATO outproduced the Warsaw Pact during the period 1974–83.

NATO AND WARSAW PACT MILITARY SPENDING

Senator LEVIN. For example, the President has said: "Over the last 10 years, the Soviets devoted twice as much of their gross national product to military expenditures as the United States, produced six times as many ICBM's, four times as many tanks, and twice as many combat aircraft."

On the spending side, is it not true that, as the Library of Congress has reported, NATO has always outspent the Warsaw Pact on defense—in 1980 by ten percent when measured in dollars and by 25 percent when measured in rubles?

Secretary WEINBERGER. Comparisons of NATO and Warsaw Pact military spending are necessarily quite rough. Our dollar estimates for the Soviet Union and its satellites are not exactly estimates of their "spending," but are estimates of what it would cost the U.S. to carry on their military programs. For our own allies, actual expenditures converted to dollars at official exchange rates, are not exactly comparable to this concept. In general, it would cost the U.S. less than our allies actually spend to acquire their weapons (because of economies of scale), and more than they spend to acquire their manpower (because their military pay is lower). In some comparisons, the manpower figure for NATO is crudely adjusted to reflect U.S. pay rates, so as to be more consistent with the "dollar cost" concept.

By this measure, the estimate that NATO's spending was 10 percent bigger than Warsaw Pact spending in dollars in 1980 is about right. I know of no reliable ruble-based comparison between the two alliances. But several points should be made about the comparison:

First, a similar comparison for earlier years shows a much wider NATO advantage (e.g., more than 60 percent in 1967), reflecting an unfavorable trend for the West in the 1970s.

Second, a clearer, more meaningful, and inherently more important comparison is that between military investment programs—i.e., excluding personnel and operating costs. Investment programs—weapons procurement, military construction, and RDT&E—build a capital stock of military assets that lasts for many years. The Warsaw Pact's military investment has exceeded NATO's for about a decade—by a margin of about 19 percent in 1980, about 6 percent in 1982.

Third, there is a major difference in the degree to which the military programs of the two sides are simply additive. For example, there are duplicative RDT&E efforts in the Western alliance, and separate procurement programs that create problems of interoperability while failing to achieve economies of scale. By contrast, the Soviets centrally direct Warsaw Pact military programs. This asymmetry means that the Warsaw Pact's effective margin of military investment is considerably larger than simple addition would suggest.

SOVIET MILITARY SPENDING AND CHINA

Senator LEVIN. Does not this ratio of defense spending favor NATO even more because a substantial part of the total Soviet military effort is directed at meeting the threat posed by the People's Republic of China?

Secretary WEINBERGER. CIA estimates that around [deleted] of the dollar cost of Soviet military programs for 1981 is attributable to forces opposite China. Some of those forces could be used for other missions. The Soviet border with China is one of a number of asymmetries in the situations of the two alliances that complicate direct comparison; the long lines of communication from the U.S. to Europe, and the dependence of NATO countries on foreign sources of energy, are examples that require NATO to divert some of its resources in ways the Warsaw Pact need not.

SOVIET MILITARY SPENDING

Senator LEVIN. With regard to Soviet production levels, is it not true that the CIA found that the slowdown in military spending rates actually was due to a leveling off of investment costs during the 1977 to 1981 period, and that Soviet defense activities grew at below average rates in 1977 to 1978, and that for 1979 to 1981 the CIA's new estimates of defense production were lower than what previously had been projected?

Secretary Weinberger. The dollar cost estimates of the Soviet military program are useful for identifying overall levels and trends in defense activity, but are not well-suited for analyzing changes in activity from year to year. The latest CIA estimate shows that the growth in the total dollar cost slowed from an annual rate of 3–4 percent in the early 1970's to about 2 percent in the late 1970's, including 1977 to 1978. This lower growth stems primarily from a leveling in the estimated procurement costs. This leveling, which was observed in earlier CIA cost studies, has only recently been confirmed as a significant trend.

The CIA's new estimates of growth in defense production for 1979–1981 are somewhat lower than previous CIA estimates. This is because certain weapon systems, known to be under development, have not yet been produced as anticipated.

SOVIET MILITARY PRODUCTION

Senator Levin. A listing of 25 categories of weapons produced for Soviet forces, excluding transfers to foreign governments, during 1977 to 1981, shows the level of production actually declined in more classes than it grew, 1 to 7, and that it remained level in the other five classes. Would you agree?

Secretary Weinberger. A DIA listing of 25 categories of weapons produced for Soviet forces to which you refer was completed about 22 months ago and at that time represented our best intelligence on the subject. It showed production of 11 weapon classes declining, 8 increasing, and 6 remaining level. Since then the estimates of output have been refined and the composition of the weapon classes have been extensively revised to provide a better gauge of Soviet military procurement efforts. For instance, joint military-civil items such as transports, trainers, communication aircraft and some helicopters, and small items such as infantry weapons, ATGMs, and nonportable SAMs have been deleted. Concurrently, new categories were added to highlight shifts in Soviet production, and to reflect current areas of major concern such as nonstrategic nuclear missile production.

In DIA's latest study of Soviet weapon production by class by year, some 18 major categories and two subcategories for a total of 20 weapon classes were used. Of these 20 categories during the 1977–1981 time period, 9 systems increased and 9 declined in production, while production rates were unchanged for the 2 other classes. During the current 5 year period 1979–1983, 10 weapon classes increased in production, 9 declined, and only 1 class remained at the same production level.

Furthermore, a comparison of these 20 weapon classes during the 1982–1983 timeframe showed production increases for 12 classes, while only 6 systems showed a decline and 2 classes remained unchanged. The fact that more systems now are increasing rather than declining indicates that Soviet weapons production is again on the upswing.

The attached chart shows the varying increases and decreases for the above referenced time periods.

Production for U.S.S.R. General Type

[Deleted.]

MAJOR SURFACE COMBATANTS

Senator Levin. Is it not also true that in terms of production rates we and our allies actually have outproduced the Soviets and their allies in terms of major surface combatants during the period 1974 to 1982 by 151 to 85?

Secretary Weinberger. During the period 1974–1983 the total production for major surface combatants produced by the U.S./NATO and the U.S.S.R./WP for use by their respective forces were as follows:

For U.S. Navy	83	For U.S.S.R. Navy	91
For NATO navies	172	For Warsaw Pact navies	107

It is important to note that these figures include only that hardware produced for use by a nation's or alliance's own forces. That hardware produced and distributed to other countries out of the alliance is not included.

ATTACK SUBMARINES

Senator **Levin**. Is it not also true during this same period we and our NATO allies produced almost the same number of attack submarines as did the Soviet and their allies—60 to 61?

Secretary **Weinberger**. During the period 1974 to 1983 the total production for attack submarines were as follows:

For U.S. Navy	30	For U.S.S.R. Navy	69
For NATO navies	62	For Warsaw Pact navies	69

TACTICAL COMBAT AIRCRAFT

Senator **Levin**. Is it not true that we and our allies produced tactical combat aircraft at a ratio of 1.2 to one—almost equal—to that of the Soviets and their allies, and the rate of production of theater nuclear missiles also was 1.2 to one—almost equal for the same, 1974 to 1982 period?

Secretary **Weinberger**. The production ratios of tactical combat (and interceptor) aircraft and theater nuclear missile production for U.S./NATO and U.S.S.R./Warsaw Pact forces during the period 1974–83 is as follows:

Tactical combat aircraft and interceptors

U.S.S.R./U.S.=2.4

WP/NATO=1.4

Theater nuclear missiles

U.S.S.R./U.S.=2.4

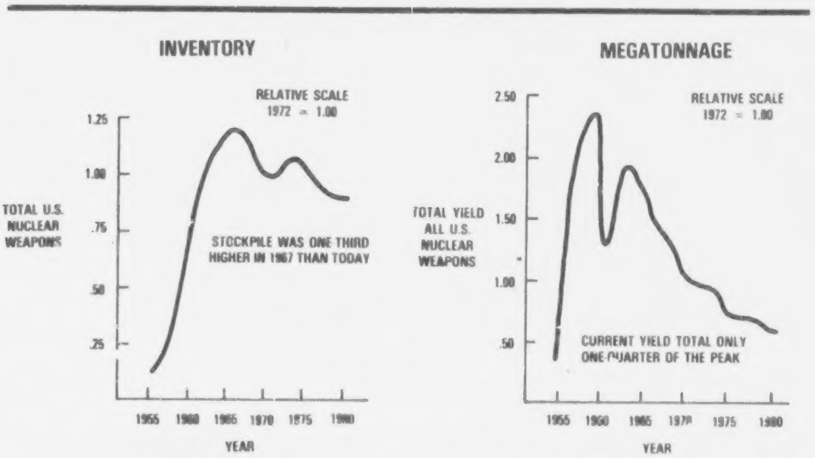
WP/NATO=1.3

STRATEGIC NUCLEAR WARHEADS AND BOMBS

Senate **Levin**. Is it also not true that during the 1970 to 1981 period we added more strategic nuclear warheads and bombs to our arsenal then did the Soviets—5920 to 5199 for a net lead of 721 strategic nuclear weapons?

Secretary **Weinberger**. This is not true. The often repeated allegation that we fostered a nuclear arms race ignores the facts and misleads the American people. In fact, from the late 1960's to date our total nuclear arsenal has decreased substantially while the Soviets have continued to increase. There was a dramatic increase in Soviet strategic systems and warheads, especially ICBM's and SLBM's, during this period which we did not match. Perhaps just as importantly, during this period we markedly reduced the total megatonnage, or destructive power, of our stockpile while we believe the Soviets continued an unabetted growth. The following charts graphically illustrate our reductions and the simultaneous Soviet expansion in which they emphasized large missiles.

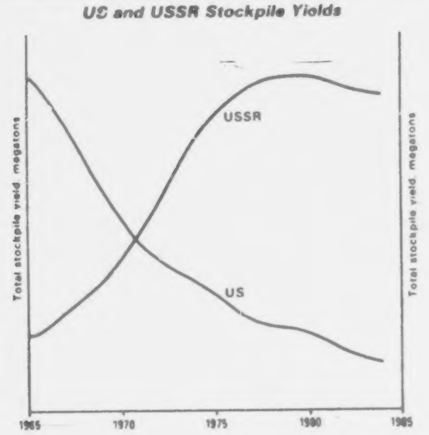
STATUS OF U.S. WEAPON STOCKPILE OVER TIME



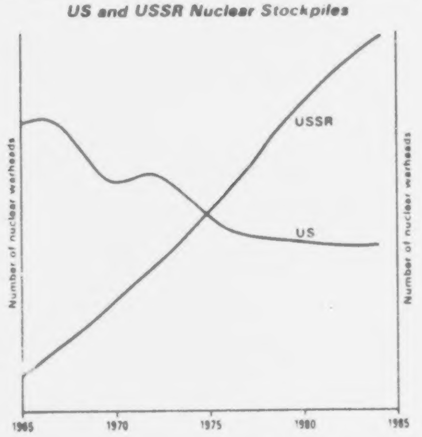
INVENTORY

MEGATONNAGE

- STOCKPILE IS AT ITS LOWEST LEVEL IN 20 YEARS
- TOTAL MEGATONNAGE IS AT ITS LOWEST LEVEL IN 25 YEARS



US and USSR Stockpile Yields



US and USSR Nuclear Stockpiles

THE STRATEGIC BALANCE

	1950		1962		1972		1982	
	US	USSR	US	USSR	US	USSR	US	USSR
Ballistic Missiles								
ICBMs	0	0	78	40	1054	1500	1053	1398
Warheads	0	0	78	40	1500	1500	2200	5900
SSBNs/SLBMs	0	0	9/144	38/100	41/656	57/500	33/544	70/950
Warheads	0	0	144	100	2200	500	5000	1600
Total Warheads	0	0	222	140	3700	2000	7200	7500
Nuclear Capable Bombers								
Bombers	250	0	1700	160	500	150	347	356
Bombs	250	0	7200	320	2400	275	2500	800

FISCAL CONSTRAINT

Senator **Levin**. Mr. Secretary, in your statement today you say: "Defense has indeed contributed a significant portion to the overall federal fiscal constraint achieved to date." However, the information provided by the Council of Economic Advisors shows that defense outlays increased as a percentage of gross national product from 5.3 percent in fiscal year 1980 to 6.9 percent in fiscal year 1984. Why are you seeking to mislead this committee and the American public in this manner?

Secretary **Weinberger**. I see no conflict in the statement that defense has contributed to federal fiscal constraint and the fact that defense outlays have increased as a share of the nation's GNP. In fact, in my testimony I pointed out that, while we do see defense outlays consuming a larger percentage of GNP, that share is still modest compared to levels experienced in the 1950's and 1960's. When we address defense outlays as a share of GNP, it is to highlight the fact that we do not believe defense consumes an exorbitant amount of our national resources and that, in this context, our defense requirements are affordable.

Fiscal constraint, on the other hand, does not have to be synonymous with no growth. We have made genuine progress within the Department of Defense in improving our acquisition process to realize economics and efficiencies in our procurement practices. These efforts, in conjunction with improved economic conditions, primarily in the form of lower inflation rates, should result in more purchasing power per defense dollar. This in turn contributes a lowering of our estimates for planned programs. In addition, the internal planning, programing, and budgeting process utilized each year within the Department as we develop our program and budget requirements generally results in a refinement, and perhaps even a restructuring, of our defense needs. The emphasis is upon achieving defense requirements, and there can be no compromise here, as economically as possible. We are not oblivious to the pressures to control growth in the federal budget. And, this is reflected in a comparison of last year's estimate for fiscal year 1985 defense requirements and the budget you have before you today. I regret your implication that I seek to mislead the Congress and the American public. The President's budget accurately reflects the requirements determined essential to ensure our national security. To recommend less would be to shirk my responsibilities as Secretary of Defense.

MINI-RAPID DEPLOYMENT FORCE

Senator LEVIN. Secretary Weinberger, you testified that about $200 million is contained in the DOD budget to fund a "mini-Rapid Deployment Force" for Jordan, if King Hussein agrees to mount such a force.

Why should not the funds for such a force be included in the regular security assistance budget, either under the grant military assistance program or the sales/loan program of the foreign military sales program, and not in the Defense Department budget?

Secretary WEINBERGER. We do not consider that the items which will be purchased for the U.S.-Jordan Joint Logistics Planning (JLP) program as a security assistance sale. The items that will be purchased will be used by Jordan to participate in activities outside Jordan's borders; are items that Jordan would not purchase for its own defense needs; will be specifically earmarked for use in this undertaking; and, will not be integrated into the regular Jordanian defensive posture.

B-1B BOMBER

Senator LEVIN. Under the fiscal year 1984 DOD Authorization Act, DOD is required to submit to Congress a new estimate for the cost of the B-1B bomber program on January 31, 1984. The new estimate becomes particularly important since the aircraft has just entered the production phase and the ability to constrain program costs rests on the learning curve assumptions which make the first few aircraft as expensive as most of the remaining aircraft.

Has DOD's independent Cost Analysis Improvement Group, the CAIG, which orginally estimated the B-1B's cost to be $26.7 billion in fiscal year 1981 dollars, examined the new estimate required under the fiscal year 1984 defense authorization?

Secretary WEINBERGER. Pursuant to Section 1240 Department of Defense Authorization Act, 1984, I have had a financial analysis conducted of the projected cost of the B-1B aircraft program. Based on this analysis, I continue to support the estimated cost certified to the Congress by the President on January 18, 1982. The OSD Cost Analysis Improvement Group reviewed this reestimation of the B-1B costs and found them to be reasonable.

It should be noted that the OSD CAIG did not prepare a point estimate of $26.7 billion in fiscal year 1981 dollars for the B-1B program. The CAIG report contained three sections that (1) discussed various areas of risk on the B-1B program, (2) estimated the cost of additional equipments not authorized by the Air Force for the B-1B but which has been discussed at various times and (3) identified other costs affected by the B-1B but not included within the $20.5B baseline figure. The GAO developed a $26.7B estimate by adding together numbers in each of these three sections.

Senator LEVIN. If not, what did CAIG estimate should be the new cost of the B-1B program, and why?

Secretary WEINBERGER. On the basis of Cost Performance Reports (CPRs) on the B-1B program—now over 50 percent complete—the CAIG recommended to me that I continue to support the $20.5B in fiscal year 1981 $ estimate for the development and production of 100 B–1B's. CPRs are DoD's standard financial management system for tracking actual costs against planned effort.

Senator LEVIN. In examining the new estimate of the B–1B program, did the CAIG have access to the documents showing the actual production experience on the B–1B?

Secretary WEINBERGER. The OSD/CAIG had access to monthly Contractor Performance Reports (CPR's) that measure individual contractor actual cost and progress relative to planned dollar expenditures and work completion.

Senator LEVIN. If not, why not, and how could CAIG accurately evaluate the new estimate without them.

Secretary WEINBERGER. The OSD/CAIG had access to actual development and production experience data.

Senator LEVIN. Does the actual production experience show that the optimistic learning curves which supported the $20.5 billion estimate actually are being achieved, regardless of the wage rates being paid the workers?

Secretary WEINBERGER. Since the first aircraft is still in production, there is insufficient experience to determine whether the predicted learning curves are being achieved. What CPR data we do have show no anomalies.

Senator LEVIN. If these learning curves are not being achieved, how can the costs be kept within the original $20.5 billion estimate?

Secretary WEINBERGER. Some labor learning will have to be achieved for the $20.5 billion goal to be achieved. However, the slopes on which the $20.5 billion are based are consistent with historical experience on other aircraft.

Senator LEVIN. Please provide to the committee the analyses done by the CAIG of the new estimate.

Secretary WEINBERGER. I have forwarded a letter to the Comptroller General stating that the OSD and Air Force analyses conducted in response to Section 1240 are available for GAO review. These analyses contain company proprietary data that we have special arrangements with the GAO to protect. I have no objection to the committee having these analyses if they will follow the same arrangements.

Senator LEVIN. When you try to make the case that the United States, NATO, and Japan can afford to spend more on defense, you combined the GNP's of all these countries and show how much larger they are combined than the combined GNP's of the U.S.S.R. and its Warsaw Pact allies.

Why do you not include all the defense production done by our NATO allies and Japan when your present charts show the defense production balance? You only show U.S. and Soviet production.

Secretary WEINBERGER. I have shown allied production together with that of the U.S. when the context calls for it. For example, in my fiscal year 1984 Annual Report, p. 24, I compared U.S. and non-U.S. NATO production with that of the U.S.S.R. and the non-Soviet Warsaw Pact. It is also appropriate to compare U.S. and Soviet production directly, as these two countries are the only superpowers whose forces and policies engage each other around the globe.

Senator LEVIN. Please provide a chart including the defense production of our NATO allies, including France and Spain, and Japan in the categories highlighted in your testimony and posture statement on U.S. and U.S.S.R. defense production. Also please include the production of the U.S.S.R.'s Warsaw Pact allies.

Secretary WEINBERGER. Following is a chart comparing defense production of NATO and the Warsaw Pact:

1974–83 NATO [DELETED] AND WARSAW PACT PRODUCTION OF SELECTED WEAPONS

	WP	NATO	[Deleted.]
Tanks	27,850	10,450	[Deleted.]
Other armored vehicles	55,400	17,500	
Field artillery, mortars and rocket launchers	29,500	3,575	
Tactical combat and interceptor aircraft	10,000	7,300	
Major surface warships	107	172	
Attack submarines	69	62	

Senator Levin. In what categories of military production that you have not listed do we, our NATO allies and Japan exceed that of the U.S.S.R. and its Warsaw Pact allies? Please provide details for the record. In these comparisons, please only include production intended for the forces of the countries involved, not that intended for export.

Secretary Weinberger. NATO out-produces the Soviet Union in the areas of major surface combatants and anti-aircraft artillery. When the production of Japan is taken into account the ratios of NATO to Warsaw Pact military production is not significantly altered.

"WALK IN THE WOODS"

Senator Levin. It was reported that the Defense Department opposed the "walk in the woods" proposed compromise agreement to limit intermediate range nuclear forces in Europe. Is this true?

Secretary Weinberger. The DOD position as well as the U.S. Government position on the package of ideas worked out on an informal, exploratory basis between Ambassador Nitze and his Soviet counterpart in July 1982 was that, although we had several problems with the proposal as it stood, we were interested in keeping this informal channel open. The Soviet reaction, on the other hand, was completely negative on both the substance of the package and the informal channel itself, so we could not pursue further informal discussions on the "walk in the woods."

DOD POSITION

Senator Levin. What was DOD's formal position on this proposal?

Secretary Weinberger. We felt that the informal channel in which the "walk in the woods" package was developed should be kept going, although we had several problems with the package as it stood. For example, the package would have eliminated the Pershing II missile and left only the Soviet Union with the right to deploy LRINF ballistic missiles. Our position is that the force that NATO deploys in response to a substantially larger and more competent Soviet force of SS–20's should contain a mix of cruise and ballastic missiles, as was envisioned in NATO's 1979 decision. Any formula which eliminated the Pershing II would not be acceptable unless the Soviets would agree to the best formula of all—the zero-zero option for the elimination of all land-based LRINF missiles on both sides.

SOVIET REJECTION

Senator Levin. Did the United States reject the walk in the woods proposal before the Soviets?

Secretary Weinberger. As we have indicated, after the recess that separated the walk in the woods from the resumption of the talks, Ambassador Nitze returned to Geneva in a position to say to the Soviets that he was prepared to keep this channel open and talk further about the proposal. At their first meeting of the new round, the Soviet ambassador informed Ambassador Nitze that the package had been rejected in Moscow, and that he would not pursue informal discussions in the channel.

TIMING OF SOVIET REJECTION

Senator Levin. Did we signal or indicate in any way our rejection of the plan—as agreed to originally by U.S. negotiator Nitze and Soviet negotiator Kvitsinskiy—before the Soviets indicated their position on it to us in any way?

Secretary Weinberger. No, not that I know of.

SALT II MIRV LIMIT

Senator Levin. With the sea trials for our seventh Trident submarine scheduled for some time next year, the U.S. will breach the SALT II limit on ballistic missile launchers with multiple independently targetable warheads—MIRV's—of 1200 by moving from 1190 MIRV'ed missiles to 1214. Does this administration intend to retire any existing MIRV'ed missiles in our strategic arsenal to remain within the SALT II limits?

Secretary Weinberger. As you correctly note, deployment of the seventh Trident could raise issues with respect to the SALT-agreed limits. Decisions concerning compensation options for deployment of the seventh Trident SSBN are very complex due to the possible applicability of both SALT I and SALT II limits. The sea trials of the seventh Trident are not scheduled to begin until late in 1985. The SALT II Treaty, as written, was meant to expire in December 1985. [Deleted] but you can be sure that this administration will carefully evaluate both the international situation and our own national security requirements in determining our overall nuclear arms reduction strategy.

SALT II INTERIM COMPLIANCE

Senator Levin. When SALT II was negotiated, both parties assumed it would be followed by another arms control agreement after it expired in 1985 and that both sides would abide by SALT II limits until that follow-on treaty superceded it.

Does this administration intend to follow that course of action and continue to abide by the SALT II limits until its START negotiations achieve a follow-on agreement?

Secretary Weinberger. Although the SALT II Treaty has not been ratified, the United States has been committed to a policy of refraining from undercutting SALT II and other existing strategic arms control agreements providing the Soviets exercise similar restraint.

The President recently reported to Congress details of available evidence of Soviet violations and probable violations of certain provisions of arms control agreements, including SALT II. The United States will continue to press its compliance concerns with the Soviets and insist upon explanation, clarification, and corrective actions. As the President has stated, the United States is continuing to carry out its own obligations and commitments under relevent agreements. [Deleted.]

When the SALT II Treaty was signed it was agreed that the treaty would remain in force through December 31, 1985, unless replaced earlier by an agreement further limiting strategic offensive arms. It was generally assumed that a new agreement would be reached prior to 1985. This objective was incorporated into Article XIV which stated "It is also the objective of the Parties to conclude well in advance of 1985 an agreement limiting strategic offensive arms to replace this treaty upon expiration." This Administration is committed to achieving a new strategic arms control agreement in the START negotiations. Although the Soviets have not agreed to a resumption date for START, we believe the Soviets will realize that a new agreement is in their best interests also and return to the negotiating table.

FISCAL YEAR 1985 DOD AUTHORIZATION

Senator Levin. Mr. Secretary, in view of increased tensions around the world, coupled with the increased possibility of terrorist acts here and abroad, it would seem to follow that we should take a close look at our mobilization plans and capabilities. With the increased emphasis on our National Guard and Reserve forces, I believe we need to insure that we have the ability to mobilize these forces rapidly and move them to where they will be employed.

Do you agree that the mobilization plans of the Nation should be tested occasionally to insure that they are responsive to our needs?

Secretary Weinberger. National mobilization plans are tested, evaluated, and improved upon through a continuing, regularly scheduled cycle of exercises. A large-scale, JCS-sponsored, worldwide, major mobilization exercise is scheduled every other year. Concomitantly, the Federal Emergency Management Agency conducts a government-wide mobilization exercise involving all other elements of the Federal government with mobilization responsibilities. Typically, the planning and preparation for these exercises covers an 18-month time period. Other major exercises in the JSC-sponsored exercise program include selective mobilization aspects as necessary to support the scenarios and specific objectives of those exercises. In addition, the Military Departments, which have the primary responsibility for mobilization, conduct their own exercises to test and evaluate Departmental mechanisms and procedures for mobilization.

MULTI-SERVICE NO-NOTICE MOBILIZATION EXERCISE

Senator Levin. When was the last time a multi-service, no-notice mobilization exercise was conducted beyond the CPX level?

Secretary Weinberger. Exercises require substantial expenditures of personnel and material resources. To insure that we obtain the maximum benefits from these expenditures, we carefully and thoroughly plan exercises to achieve a number of objectives, and we employ command post exercises (CPX) wherever practicable to achieve these objectives. Therefore, while the Military Departments may from time to time conduct smaller no-notice mobilization exercises, and may also inject actual uni-service mobilization play into our larger major mobilization exercises, we do not normally conduct multi-service, no-notice mobilization exercises beyond the CPX level.

Senator Levin. How can we know that a full or even a partial mobilization can be conducted within an acceptable time frame if we do not adequately test the plan?

Secretary Weinberger. We believe that our procedures for testing and evaluating our mobilization plans are fully adequate. The Organization of the Joint Chiefs of Staff conducts a Remedial Action Projects Program which identifies deficiencies and shortcomings disclosed in our exercises, determines the actions necessary to correct these, and monitors the remedial process through to completion. The Office of the Secretary of Defense and the Military Departments participate fully in this program, as well as conduct similar programs for their own unique deficiencies and shortcomings. In addition, for the past several years we have been working closely with the other Federal departments and agencies to develop plans and procedures for the essential support required from non-Defense sources for mobilizaiton and deployment of our forces. We are confident that we can mobilize acceptably now, even as we are working to improve both these capabilities and those necessary to sustain the forces once mobilized and deployed.

ACTIVE/RESERVE MIX

Senator Levin. Mr. Secretary, as you well know, Congress has been very interested in the active/reserve mix in the total force, as well as upgrading the hardware in the reserve components.

Would you expand on your statement and be a little more specific about your intentions and plans to upgrade the reserve components?

Secretary Weinberger. Since fiscal year 1980, the manning level of the Selected Reserve has been increased from 850,000 to over 1.1 million. Even after adjusting this increase for the previous transfer of certain Reserve manpower categories into the Selected Reserve for the purpose of portraying the most realistic depiction of mobilization readiness, a growth factor of approximately 27 percent is reflected. Continued manpower growth is programed for the Selected Reserve in the future and by fiscal year 1988 it is projected that over 50 percent of the total Army strength will be a part of the Army National Guard and Reserve. Funding increases in fiscal year 1985 constant dollars reflect an overall program growth, since fiscal year 1980, of approximately 34 percent in the areas of operation and maintenance and military construction for the Reserve Components. Progress has also been realized in equipment acquisition and modernization during this period. While some Reserve Component equipment problems still remain, the equipment policy of the Department is to give priority to those units that will be "first to fight," whether active, Guard or Reserve. In this regard, selected National Guard units are receiving the M–1 Abrams tank and the Bradley fighting vehicle, our most modern armor; Army Reserve units are flying the UH–60A helicopter; some Air Guard and Reserve squadrons are being equipped with the F–16 fighter aircraft; an Air Force Reserve unit will be receiving the C–5 strategic airlift during fiscal year 1985; a Naval Air Reserve squadron will train with the new F/A–18; and the Naval Reserve Surface Force is operating and continuing to be outfitted with additional modern *Perry*-class guided-missile frigates.

HORIZONTAL INTEGRATION

Senator Levin. In this regard, the Naval Air Reserve was scheduled to commence the "Horizontal Integration" of F/A–18's into its attack squadrons in fiscal year 1984. I believe it was to be July of this year. But now, I understand this plan has been delayed for three years. From what I have heard, the concurrent introduction of new aircraft into the active and reserve communities has given the Naval Air Reserve a tremendous boost in morale. The original plan was consistent with the intent to modernize the reserve components. Has the assignment of F/A–18's into the Naval Reserve been delayed?

Secretary WEINBERGER. VFA–303, located at NAS Lemoore, California, which is the first Naval Reserve F/A–18 squadron, was established on 1 January 1984 and is currently in training to fly the F/A–18 this year as previously scheduled. Several pilots are already fully qualified in the aircraft and a large portion of the squadron's enlisted training on the F/A–18 is complete. VFA–303 will initially train and operate aircraft assigned to VFA–125, the F/A–18 Fleet Replacement Squadron at NAS Lemoore. The squadron will continue to operate VFA–125 aircraft until receipt of their own in 1986.

Senator LEVIN. If the transition has been delayed, why the change of plans and what will be done with the Reserve pilots and maintenance personnel who have already completed transition training?

Secretary WEINBERGER. The transition of VFA–303, the first Reserve squadron, provides the unique opportunity to maximize our expertise as we integrate this new multi-mission capable strike fighter into the total Navy force structure. Not having to meet a peacetime carrier deployment schedule, VFA–303 operating in concert with VFA–125 for a period of time permits an integration of knowledge between active and reserve personnel that should greatly enhance the Navy's F/A–18 introduction to the fleet. We have a tremendous amount of talent and experience in the Naval Reserve. Coupling this with the resources available in the active force, we cannot help but end up with a much superior product.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

MID-SESSION SPENDING LEVEL

Senator KENNEDY. Secretary Weinberger, during the mid-session budget review in July 1983, what level of defense spending did the Department of Defense indicate it would request for fiscal year 1985?

Secretary WEINBERGER. The mid-session review in July 1983 reflected $321.4 billion for defense in fiscal year 1985; however, the current services estimate at this same time was $321.6 billion. The difference was the offsets in fiscal year 1985 for the program increases in fiscal year 1983 related to the Jobs Bill legislation.

BASIS FOR REDUCTION DECISIONS

Senator KENNEDY. At what point did you determine to reduce that request to $305 billion for fiscal year 1985? What was the basis for your decision to reduce that request from the level you had requested earlier that year?

Secretary WEINBERGEG. As I stated earlier, we subjected all programs to a critical screening during the budget review process. We were well aware of the need for fiscal constraint in fiscal year 1985, but we also were well aware of the continued need to sustain the rebuilding of our defense capabilities.

DISCUSSIONS ABOUT THE BUDGET LEVELS

Senator KENNEDY. Did you at any time between July and December 1983 recommend and/or discuss with President Reagan and/or OMB Director David Stockman a level of defense spending in excess of $305 billion for fiscal year 1985?

Secretary WEINBERGER. Obviously, there have been several discussions since July 1983 with both David Stockman and President Reagan about the defense budget levels for fiscal year 1985. However, it is difficult to put a dollar amount on the defense budget until such time as programmatic decisions are made with regard to the force capabilities that are to be achieved.

QUESTIONS SUBMITTED BY SENATOR JEFF BINGAMAN

RESEARCH BUDGET

Senator **BINGAMAN**. Secretary Weinberger, basic research funding in the DOD 6.1 account apparently shows only a five to six percent real growth this year, far less than the overall DOD budget.

Why has such a cost-effective part of our whole defense effort been apparently slighted?

Secretary **WEINBERGER**. The budget for basic research funding for fiscal year 1985 is $900 million. The final appropriation for fiscal year 1984 was approximately $840 million. The apparent real growth is two to three percent. However, an additional 3 percent of research funding originally in the 6.1 budget was transferred to the President's Strategic Defense Initiative along with specific projects aimed at contributing to the basic technology required.

The importance of knoweldge and concepts which result from the research program not only for our own future military capabilities but also for the prevention of technological surprise are recognized in DOD. The research program also helps to train our future scientists and engineers. It is true that the overall RDT&E budget has increased by a greater percent than the basic research program. This reflects our commitment to modernize and increase the readiness of our forces and deployed systems.

RESEARCH INSTRUMENTATION INITIATIVE

Senator **BINGAMAN**. Under the Research Instrumentation initiative, $20 million a year is authorized for a five-year program. I understand that requests from universities under this program exceed the authorized amount by large factors. Would it not be advisable to try more vigorously to upgrade university capabilities, when the universities are doing DOD-funded research?

Secretary **WEINBERGER**. The Department of Defense took the lead among Government agencies in initiating a program to address the serious national shortage of modern research equipment in universities. Following this lead, other agencies such as the National Science Foundation and Department of Energy have started similar instrumentation programs this year which will further alleviate the problem. For the current 2-year solicitation period of the DOD program, which closed in January 1984, approximately 1900 proposals requesting a total of $370 million were received. Since $60 million is being competed in this solicitation, funding requests exceed funds available by a factor of six, in contrast to a factor of twenty in the first year of the program. We feel that the level of funding for the instrumentation program is reasonable in light of the new, complementary programs in other agencies and in light of the importance of maintaining healthy funding support for regular research proposals.

Senator **BINGAMAN**. Do you agree with the skepticism expressed by your Deputy, Mr. Taft, during his confirmation hearing concerning the effectiveness of polygraph examinations in some contexts?

Secretary **WEINBERGER**. The Department recognizes that the polygraph is not infallible and has, therefore, historically followed the policy that the polygraph will be used only as an aid in support of other investigative techniques and be employed generally, only after investigation by other means has been as thorough as circumstances permit. Our extensive experience in this area clearly indicates that polygraph examinations can, when administered by qualified, professional examiners, be extremely useful in securing and verifying evidence or information that could not be obtained by other means.

Senator **BINGAMAN**. In view of the negative OTA report on the scientific validity of polygraph testing along many of the lines proposed for this method in Proposed DOD Directive 5210.48, do you intend to withdraw said directive?

Secretary **WEINBERGER**. As you know, a congressional amendment to the fiscal year 1984 defense authorization bill prohibited any expansion of DOD polygraph activities until 15 April 1984. The purpose of this moratorium was to permit Congress more time in which to review and evaluate the changes that have been proposed to DOD Directive 5210.48. Accordingly, a final decision regarding the

Directive will be held in abeyance until the Department has had an opportunity to review and evaluate any comments or recommendations that may be made by interested congressional committees or subcommittees.

With respect to the OTA report, the Department has reviewed the final version of this report and believes that it contains many of the same deficiencies that were previously identified to OTA as a result of a review of an earlier draft of the report. Comments made by the Department in this regard largely parallel those made by members of OTA's advisory panel during a meeting held on 23 August 1983 and indicate that the report is, in many respects, inaccurate and incomplete in its analysis of the studies and research that have been conducted concerning the validity and reliability of the polygraph. Specifically, in some instances, erroneous conclusions are stated without any supporting evidence; in other instances identical data is used to substantiate different and often contradictory conclusions; and finally, DOD polygraph procedures are inaccurately described and DOD's proposed use of the polygraph, incorrectly portrayed. Moreover, the Department has developed its own report in this area which indicates that there is valid evidence to support the utility of the polygraph. In view of this situation, it is not believed that it would be appropriate to base a final decision regarding the proposed polygraph policy solely on the OTA report.

Senator BINGAMAN. If the directive is implemented, are you concerned about the effect of its implementation on the morale of DOD employees, who will be aware of the non-negligible possibility of false positives?

Secretary **WEINBERGER.** The Department has made an assessment of this matter and believes that the proposed Directive will not generally impact adversely on employee morale in light of the fact that only questions of a counterintelligence nature and not a personal nature may be asked, and the results of the polygraph cannot be utilized as the sole basis for action against the employee.

This assessment is supported by a number of studies that have been made by the Department in this area and which are included in the Department's recent report on the issue of the accuracy and utility of the polygraph. For example, in 1982, the U.S. Air Force surveyed individuals who, as part of a pilot project, voluntarily took counterintelligence scope polygraph examinations in connection with determining their eligibility for access to extremely sensitive and highly classified U.S. Air Force projects. Immediately following the polygraph examination, individuals were requested to complete, on a fully anonymous basis, a questionnaire regarding their reaction to the examination. More than 98 percent of the 1,355 individuals responding indicated that they were not offensive, embarrassed, humiliated or degraded by the examination; did not find the examination to be an unwarranted invasion of their privacy; felt counterintelligence polygraph examinations enhance the security of the work environment; and, would undergo a polygraph examination in the future.

JOINT MILITARY TRAINING CENTER AT PUERTO CASTILLO

Senator BINGAMAN. Please provide total cost to date and planned funding to date for the Joint Military Training Center at Puerto Castillo.

Secretary **WEINBERGER.** Costs for the Honduran Regional Military Training Center which were paid from FMS Credit/MAP are as follows:

[In millions of dollars]

	Fiscal year—		
	1983	1984	1985
El Salvador	4.8	5.7	0
Honduras	.5	1.6	0
RMTC	....	25.0	20

Costs above attributed to El Salvador and Honduras include establishment of an austere training center in Honduras to include operating expenses, sustainment costs, utilities, and maintenance. Figures asterisked are requested amounts which would include the above as well as training costs and expenses involved in constructing a permanent training facility at the RMTC.

Senator BINGAMAN. Please provide total, not incremental, cost figures for Big Pine I, Big Pine II, and estimates for the Big Pine III joint military maneuvers. Please include specific figures for the improvement of runways at Ia Ceiba, Aquacate, Comayagua, Puerto Castillo, and Trujillo.

[The information requested was not received in time for printing.]

Senator **Bingaman**. What figures are shown in the five year defense plan—FYDP—just updated for 1985 to 1989 for Honduras, including, but not limited to, military construction, joint exercises, and military assistance?

[The information requested was not received in time for printing.]

Senator **Bingaman**. What actions have been accomplished and are contemplated as a follow-up to the recommendations of the Long Commission report?

Secretary **Weinberger**. Yet me supply the DOD actions on that.

Department of Defense Actions on the Recommendations of the Long Commission

In the aftermath of the terrorist bombing at Beirut International Airport on October 23, 1983, the Department of Defense has engaged in an intensive review of our military policy and posture with respect to the Multinational Force in Lebanon. Much of this effort has been in conjunction with the continuing review of our peacekeeping efforts by the National Security Council.

This is a summary of the major actions taken by the Department in regard to the recommendations of the Long Commission. The Department also has reviewed carefully the report of the Investigations Subcommittee of the House Armed Services Committee, which has proved most helpful in addressing the recommendations of the Long Commission.

1. ALTERNATIVE MEANS OF ACHIEVING U.S. OBJECTIVES

The Commission recommended that the Secretary of Defense continue to urge that the National Security Council undertake a reexamination of alternative means of achieving U.S. objectives in Lebanon to include a comprehensive assessment of the military security options being developed by the chain of command and a more vigorous and demanding approach to pursuing diplomatic alternatives.

We agree that such a reassessment is desirable, and the Secretary has pursued this matter within the National Security Council. The options developed by the chain of command, as well as other diplomatic alternatives, are under active consideration by the National Security Council at this time.

2. RULES OF ENGAGEMENT (ROE)

Although the Commission did not make specific recommendations with respect to rules of engagement, the report was critical of the fact that a "single set of ROE providing specific guidance for countering . . . vehicular terrorist attacks . . . had not been provided to, nor implemented by, the Marine Amphibious Unit (MAU) Commander."

We agree that a single set of ROE is desirable. The MAU has implemented a single set of ROE for all Marines in Beirut. The United States Commander-in-Chief (Europe) (USCINCEUR) has assured the Secretary of Defense that every member of the United States Contingent of the Multi-National Force (USMNF) is fully cognizant of all the facets of ROE concerning self-defense.

3. THE CHAIN OF COMMAND

The Commission recommended that the Secretary of Defense take whatever administrative or disciplinary action he deems appropriate, citing the failure of the USCINCEUR operational chain of command to monitor and supervise effectively the security measures and procedures employed by the USMNF on October 23.

The chain of command took actions to plan and supervise security measures which were viewed at the time as sufficient. The tragedy itself demonstrates that these measures were not sufficient. Such a retrospective determination, however, does not represent a determination that specific commanders in the chain of command were negligent in their duties. The Secretary of Defense has directed the chain of command to take specific measures to ensure that lessons learned from this experience will be used to better protect our servicemembers in the future.

The following are among the major actions that have been taken to insure that the chain of command provides effective supervision of the USMNF force security posture:

USCINCEUR has initiated a program under which a general/flag officer from the United States European Command (USEUCOM) visits the USMNF on a periodic basis. The purposes of his visits is to evaluate progress made on the security enhancement program and to respond to any request for assistance that might impact on the USMNF. Each visit results in a trip report delineating specific measures that have been taken or should be taken to improve USMNF security. Also, since October 23, specialists from HQ USEUCOM have conducted three special physical security inspections of the USMNF. The inspectors evaluate anti-terrorist security measures being taken by the USMNF and provide assistance.

4. INTELLIGENCE

The Commission recommends that the Secretary of Defense establish an all-source fusion center, which would tailor and focus all-source intelligence support to U.S. military commanders involved in military operations in areas of high threat, conflict, or crisis.

The Commission further recommended that the Secretary of Defense take steps to establish a joint CIA/DoD examination of policy and resource alternatives to improve immediately Human Intelligence (HUMIT) support to the USMNF contingent in Lebanon and other areas of potential conflict that would involve U.S. military operating forces.

We find merit in both of these recommendations regarding intelligence support. The Secretary of Defense has discussed these recommendations with the Director of Central Intelligence, and he is aware of our intent to take positive action in response to both. Appropriate tasking memoranda and deadlines have been assigned.

5. PRE-ATTACK SECURITY

The Commission recommended that the Secretary of Defense take whatever administrative or disciplinary action he deems appropriate, citing the failure of the Battalion Landing Team (BLT) and MAU Commanders to take the security measures necessary to preclude the catastrophic loss of life in the attack on October 23.

The BLT commander was responsible for the security of the compound, and the MAU commander was responsible for the supervision of that security. It is obvious, in retrospect, that the planning and implementation of security measures did not provide adequate security. The Secretary of Defense has directed the Secretary of the Navy to issue appropriate administrative letters to bring these views to the attention of these commanders. The Secretary of Defense has determined that in view of the unique circumstances of this tragedy, it would not be appropriate for such letters to be filed in the permanent official records of the individual concerned.

6. CASUALTY HANDLING

The Commission recommended that the Secretary of Defense direct the Joint Chiefs of Staff, in coordination with the Services, to review medical plans and staffing of each echelon of the operational and administrative chains of command to insure appropriate and adequate medical support for the USMNF.

The Commission further recommended that the Secretary of Defense direct USCINCEUR to conduct an investigation of the decisions made regarding the the destination of aeromedical evaluation aircraft and the distribution of casualties on October 23.

USCINCEUR is considering plans for enhanced medical planning and staffing for the USEUCOM medical staff. In addition, Commander in Chief, U.S. Navy (Europe) is developing additional authorization requirements for his medical staff and for those of his subordinates. A letter of instruction for medical support of the USMNF has been staffed at EUCOM with distribution expected shortly. This will further define responsibilities and assign tasks governing hospitalization and evacuation.

USCINCEUR has investigated the decisions on casualty handling taken on October 23. He does not agree with the Commission's conclusion that more casualties should have been taken to Akrotiri, Cyprus. He agrees that, in retrospect, different decisions could have been made with respect to handling of casualties in Germany, but has found that there was no adverse impact on patients resulting from the decisions as to distribution of casualties.

The Assistant Secretary of Defense (Health Affairs) has been directed by the Secretary of Defense to conduct an independent 90-day review of the medical aspects of the bombing and the adequacy of medical readiness planning in USEUCOM.

7. IDENTIFICATION OF THE CASUALTIES

The Commission recommended that the Secretary of Defense direct the creation of duplicate medical/dental records and assure the availability of fingerprint files for all military personnel. The Commission further recommended that the Secretary of Defense direct the Service Secretaries to develop jointly improved, state-of-the-art identification tags for all military personnel.

We agree that there is an opportunity for improved record keeping, and the necessary studies have been initiated. We anticipate receiving a policy recommendation on duplicate medical, dental, and fingerprint records by mid-February. A recommendation with respect to improved identification tags is expected by the end of May.

8. POST-ATTACK SECURITY

Recognizing that the Secretary of Defense and the Joint Chiefs of Staff have been actively reassessing the increased vulnerability of the USMNF as the political/military environment in Lebanon has changed, the Commission recommended that the Secretary of Defense direct the operational chain of command to continue to develop alternative military options for accomplishing the mission of the USMNF while reducing the risk to the force.

We agree that alternatives should be developed to accomplish the mission of the USMNF while reducing the risk to the force. A variety of alternatives have been recommended by the Joint Chiefs of Staff and the Secretary of Defense to the National Security Council.

Since the October 23, 1983 terrorist incident, the upgrade of USMNF defensive positions has been a continuous process. The USMNF has made significant progress in improving positions against all known threats. Improvements to the physical security of the USMNF include the following:

(a) The erection of a barricade system completely surrounding the built-up area. This system includes the following rings of protection: Dragon Teeth (6x6x6 concrete blocks); dirt berm; in-place iron fence; anti-tank ditch; and concertina wire.

(b) Redisposition of forces to provide improved tactical defenses and more effective fields of fire.

(c) Improvements to the berming, fencing, tank obstacle and barrier arrangements.

(d) Relocation of the BLT and MAU Headquarters to a field location away from the airport built-up area.

(e) The security for Beirut International Airport (BIA) is the mission of the Lebanese Armed Forces (LAF). After the bombing, the LAF took the following steps to enhance security:

1. The two-lane roads in BIA have been reduced to one lane and an additional LAF checkpoint has been established to control traffic into the airport.
2. LAF armored personnel carriers have been positioned in front of the terminal building and at the traffic circle at the entrance to the airport.

(f) Specific measures taken by the USMNF within the compound at BIA include:

1. The construction of bunkers for command and control facilities and for personnel protection.
2. Berms constructed around the site to provide protection from sniper fire.
3. All nonessential BLT headquarters personnel are billeted aboard ship.
4. Entrances to the airport built-up are blocked and reinforced. Entrance of vehicles into airport build-up area is restricted to one location.
5. Vehicle access to the command post is restricted to emergency and military vehicles.
6. All vehicles entering USMNF positions at BIA must slowly negotiate a serpentine entrance way.
7. Weak points along the fence are blocked with derelict automobiles and buses.

8. Gates to the east and south are heavily fortified and all vehicles are stopped and searched prior to entering.

9. All gates and likely avenues of approach are covered by M-60, .50 cal machineguns, LAAWS, and DRAGONS. High intensity lighting has been installed to illuminate likely avenues of approach.

(g) Additional steps taken include:

1. Deployment of bomb detection dog teams to Beirut.

2 Augmented naval forces in support of USMNF with a second aircraft carrier battle group.

3. Retention of USS New Jersey on station in the Eastern Mediterranean.

4. Improved MAU command structure by assigning a Brigadier General as Commander with commensurate staff support.

9. TERRORISM AS A MODE OF WARFARE

The Commission recommended that the Secretary of Defense direct the Joint Chiefs of Staff to develop a broad range of appropriate military responses to terrorism for review, along with political and diplomatic actions, by the National Security Council.

We agree that our current posture could be improved in this area. DOD has formed a working group to: (a) analyze the terrorist threat; (b) examine our capability to deter, defend, and counter the threat; (c) identify deficiencies in current U.S. capabilities to combat terrorism, especially those acts sponsored by a sovereign state; and (d) develop recommendations to the JCS to enhance U.S. posture to combat international terrorism.

The JCS have also advised the CINCs of the increasingly serious nature of terrorism and have solicited their views for incorporation into this review. It is anticipated that a final report, including a plan of action, will be completed on March 30, 1984.

10. MILITARY PREPAREDNESS TO DEFEND AGAINST TERRORISM

The Commission recommended that the Secretary of Defense direct the development of doctrine, planning, organization, force structure, education, and training necessary to defend against and counter terrorism.

We agree that our current anti-terrorism posture could be improved. We shall give primary emphasis to application of the current program by those who face a direct and immediate terrorist threat. The services are currently conducting an independent program review, and the Assistant Secretary of Defense (International Security Affairs) will provide the Secretary of Defense with recommendations for changes by January 31, 1984.

Although we have taken many actions to implement the recommendations of the Long Commission, we should not generate overly optimistic predictions about combatting terrorism. Terrorist attacks occur even in homogeneous societies where effective police agencies and sophisticated intelligence organizations exist. Although improvements can be made that may reduce the likelihood of successful terrorist attacks, it is not reasonable to expect that changes can be made that will eliminate the possibility of such attacks.

Senator BINGAMAN. My understanding is that there is still no charter, nor a proposed director, for the congressionally mandated Office of Operational Testing and Evaluation, although it was agreed that this office would be created by November 1, 1983.

Why is this the case?

Secretary WEINBERGER. We began setting up the office in November 1983, but it takes time to complete all of the arrangements and recruit the staff necessary to make it fully operational. We are moving ahead as quickly as possible and will continue to do so.

Developing a charter for a new OSD office, particularly when the program involved is as complex as the operational test and evaluation (OT&E) program, takes time. This is because it requires careful review by the key officials in the Department to insure that the management policies and other arrangements the charter establishes will work effectively and will not cause any unexpected problems; such as, the disruption of schedules or the introduction of unprogramed cost growth. An initial draft charter for the OT&E office is currently being reviewed by the Service Secretaries and other interested officials within the Department. Once we have received all of their comments and recommendations, we will be in a position to finalize and publish the OT&E charter.

The selection of a Director of OT&E is also a time-consuming process if it is to be done properly. We are committed to selecting the best qualified individual available for this position, and for this reason, we have undertaken an extensive nationwide search. As part of this effort, we have asked the Service Secretaries, the Operational Test Commanders, and more than a dozen professional associations closely connected with RDT&E activities, to recommend potential candidates. The fruits of our canvassing are currently being reviewed to select a nominee for consideration by the President and, if he concurs, for confirmation by the Senate.

I would like to emphasize that, even though we have not finalized the OT&E charter or selected a Director, the Department is in full compliance with all OT&E statutory requirements. In November 1983, at the same time I initiated action to establish the OT&E office, I also directed Dr. Isham Linder, currently the Director of Defense Test and Evaluation, to temporarily oversee the transition process and the work of the Office until a permanent Director is appointed. Accordingly, Dr. Linder is supervising the planning and execution of OT&E pertaining to all major weapon systems and is reporting directly to me on these matters, in accordance with the law. In addition, I have provided the Congress with the required annual report on Defense OT&E. This report covers operational test activities over the past year and provides information regarding the resources, facilities, and funding involved in operational testing.

As you can see, we have not been dragging our feet on this matter. I am fully committed to carrying out the provisions of the law pertaining to OT&E matters in the Department of Defense and will continue to proceed as quickly as possible to complete all of the actions required to establish the OT&E office in OSD.

Senator **Bingaman**. When will the office be created?

Secretary **Weinberger**. Some of the members of the OT&E staff are already in place and working under Dr. Linder's supervision. And, as I have already indicated, we are meeting all of our obligations under the law on schedule. To this extent, the office is already created and functioning.

We are in the process of recruiting and selecting the rest of the staff and completing all of the administrative arrangements that inevitably accompany the establishment of a new office. I believe you will continue to see steady progress in this area in the weeks ahead.

Senator **Bingaman**. The President's Scientific Advisor, Dr. Keyworth, recently suggested in a speech at Sandia National Laboratory that using the capabilities of the national laboratories for non-nuclear as well as nuclear weapons research would be desirable. Do you agree with this point of view?

Secretary **Weinberger**. Yes. We believe a cooperative non-nuclear munitions effort between DoD and the DoE national laboratories would make use of unique lab capabilities and be a very efficient way to expand our research in this high technology area, as Senator Nunn and others have emphasized. We have included funds in our budget request to begin a cooperative effort at the labs.

Chairman **Tower**. Secretary Weinberger, General Vessey, thank you very much.

This hearing is adjourned.

[Whereupon, at 1:25 p.m., the committee was adjourned.]

Report of the Secretary of Defense
Caspar W. Weinberger
to the Congress

on the
FY 1985 Budget, FY 1986 Authorization Request
and
FY 1985-89 Defense Programs

February 1, 1984

This Report Reflects the FY 1985 Defense Budget
as of January 30, 1984

TO THE CONGRESS OF THE UNITED STATES

Three years ago a newly inaugurated President Ronald Reagan stood at the West Front of the Capitol and promised that "when action is required to preserve our national security, we will act." Recognizing that the preservation of peace required more than just rhetoric or good intentions, he committed his Administration to take the steps necessary to deter aggression and promote stability and freedom in a complex and changing world.

For a President taking office in January 1981, this was not a pledge to be given lightly. By the beginning of this decade, a majority of Americans were expressing their concern, indeed their fear, that the world had become a more dangerous place. They recognized that we faced a crisis of leadership, as the impression grew both at home and abroad that the United States was a superpower on the decline, unable to protect its citizens or its interests against a growing threat.

The 1980 election sent a clear signal that the American people wanted to reverse this dangerous slide and to restore America's position in the world. They recognized that we must regain the strength of our armed forces and restore the military balance so essential for preserving deterrence. They recognized that we must begin again the quest for genuine arms reductions, not settling for negotiations that resulted in merely codifying the growth in nuclear arsenals. We seek agreements that will reduce armaments of all kinds to lower, equal, and verifiable levels. Finally, they recognized that the United States, while it could not and should not be the world's policeman, nevertheless needed to reassume a leadership role recognized by our allies and friends, and our foes and potential enemies.

The American people entrusted responsibility for fulfilling this mandate to Ronald Reagan, and he and his Administration accepted that responsibility. Today, we have firm leadership to keep us steady on our course -- leadership that combines a realistic understanding of the dangers and complexities of our world with a firm commitment to do what is necessary to preserve peace.

In this year's Annual Report to the Congress, we present our defense program for preserving peace in a dangerous world. We also assess this Administration's three-year stewardship of our nation's defenses, and the progress we have made toward fulfilling the mandate entrusted by the American people to Ronald Reagan in 1980.

A Realistic Approach to Peace

"A safer world," President Reagan told the American Legion last August, "will not be realized simply through honorable intentions and good will . . . No, the pursuit of the fundamental goals our nation seeks in world affairs -- peace, human rights, economic progress, national independence, and international stability -- requires a dedicated effort to support our friends and defend our interests. Our commitment as peacemaker is focused on those goals."

In making this statement, President Reagan confronted the paradox of peace -- that to preserve it, the peacemaker must be prepared to use force and use it successfully. Only if we can convince any potential adversary that the cost of aggression would be far greater than any possible benefit, can we be certain that aggression will be deterred and peace preserved.

We had to begin with a hard look at the challenges facing this nation as it entered a new decade. Our alliances were being subjected to new strains, as expanding Soviet military power required greater defense efforts by all members to restore the military balance. In the Third World, we saw the reach and intensity of conflict fueled by increased Soviet support for terrorism, insurgency, and aggression. Above all, at the beginning of this decade we were confronted by a Soviet Union increasingly capable of upsetting the stability of nuclear deterrence, of projecting power well beyond its borders, and of conducting offensive operations with larger, technologically sophisticated, and increasingly flexible forces.

This renewed sense of realism about the challenges we faced only strengthened our resolve to work for peace. Indeed, by directly facing the dangers posed by the erosion in the military balance with the Soviet Union, and by demonstrating in Grenada and Lebanon that the United States would not be held hostage to terrorism, President Reagan's leadership enhanced deterrence by strengthening the confidence of our friends and allies and complicating the calculations of potential aggressors.

Similarly, a realistic appraisal of Soviet negotiating behavior -- an appraisal that does not rely on assumptions of Soviet good will -- has improved the prospects for arms reductions. We recognized that the Soviets would accept genuine, significant, verifiable arms reductions only if they became convinced that the alternative was not Soviet superiority, but an American determination to maintain the strategic balance. By demonstrating the capability and the will to restore that balance, we are offering the Soviets a strong incentive to join us in reaching a negotiated "build-down" of the most dangerous arsenal ever to threaten mankind.

Restoring America's Defenses

In facing up to the realities of a dangerous world, we also had to confront the serious deterioration of our own military posture. Any one of the problems we faced -- low levels of readiness and sustainability, difficulty recruiting and retaining qualified personnel, shortfalls and obsolescence of military hardware, and higher costs from inefficient management of defense resources -- would have required immediate attention. This Administration had little choice but to address them simultaneously if we were to fulfill President Reagan's pledge and, indeed, the American people's mandate to act to preserve our national security. And so, with the bipartisan support of the Congress, we started a major effort to restore the strength of our defenses.

Readiness and Sustainability. By the beginning of this decade, the readiness of our forces to meet a crisis and sustain operations had seriously eroded. In a speech from the Oval Office last March, President Reagan recalled from the early days of his Administration that "I was appalled by what I found: American planes that could not fly and American ships that could not sail for lack of spare parts and trained personnel, and insufficient fuel and ammunition for essential training." Depleted stores of vital military supplies were inadequate for combat operations, encouraging potential aggressors to calculate they could outlast us in a conventional conflict.

We acted immediately to improve the readiness and sustainability of our forces. Today, three years later, 39% more of our major military units are categorized as fully or substantially ready for combat. At the same time, our capability to sustain our forces in the field will have increased by almost 50% when the munitions and secondary items procured by the FY 1985 budget are delivered.

Personnel. When this Administration took office, morale in the armed forces was dangerously low, the result of a failure to give our men and women in uniform the compensation, the tools, or the respect they needed and deserved. The quality of new recruits declined, while experienced personnel left the military in droves. Fewer than ten years after its establishment, many were claiming that the All-Volunteer Armed Forces was a failed experiment, and calling for a return to conscription.

Today, people are our biggest success story. Retention and recruiting are up dramatically. The Navy and Air Force attained record high reenlistment rates last year, and all the Services are meeting their recruiting quotas. Moreover, 91% of the new recruits are high school graduates, up from 68% in 1980. And these retention and recruiting successes are coming at a time when the economy is improving, a time when skeptics said young Americans would turn their backs on the military.

Conventional Modernization. This Administration also had to confront a major shortfall in weapons and equipment. Much of what we did have, moreover, was aging and increasingly obsolete compared with new Soviet hardware. The 1960s-era tanks, artillery, and armored vehicles in our ground forces were threatened with block obsolescence; the number of ships in our Navy had fallen by more than half; and our aircraft needed upgrading to counter dramatic improvements in Soviet aircraft and air defenses. Although the previous Administration had announced a new commitment to defend our access to resources in Southwest Asia, we lacked the airlift, sealift, and amphibious capabilities to move our forces quickly in time of crisis, or to support them if they became involved in combat.

It would be a heavy responsibility for any President or Secretary of Defense to have to order American troops into battle facing Soviet equipment that was known to be superior to ours. That is a responsibility the previous Administration would have had to face. We had to change that situation. Now, we can be confident that should war break out, our men will have equipment that is at least equal to, and in many cases superior to, that of the Soviets. For that very reason, it is increasingly unlikely we will have to test any of it in combat.

The FY 1982 budget and associated five-year plan of the previous Administration were not only inadequate for the rebuilding task we confronted; they were also gravely underfunded and could not have been carried out as planned. During the past three years, we have restored funding for several vitally needed programs, and are now successfully embarked on a long-term program to modernize our forces for the future.

Our ground forces are now receiving the modern weapons they need to deter quantitatively superior and increasingly sophisticated Soviet forces. The M-1 tank recently proved its tremendous capability in NATO's annual tank competition, performing better than any other U.S. tank in history. The Army's new Bradley fighting vehicle gives the infantry the mobility and firepower to fight alongside the tanks. And giving support and protection to those ground forces is the new multiple-launched rocket system (MLRS), which provides long-range artillery fire.

The Navy fleet now stands at 516 ships, as 23 modern, more capable ships were delivered in 1983. The saga of one of these ships -- the battleship New Jersey -- since she was recommissioned by President Reagan in December 1982 points out the timeliness of our naval expansion. Having left San Diego last summer on a shakedown cruise to Asia and the South Pacific, the New Jersey was then called back to Central America to support U.S. forces training there. She was next sent to the Eastern Mediterranean, where she remains on station supporting the multinational peacekeeping force. In her first year, the New Jersey put 30,000 miles under her keel.

The Marine Corps, with longer-range 155m howitzers, CH-53E helicopters, and F/A-18 fighter and attack aircraft, will have even greater mobility and greater firepower to accomplish the wide range of missions it must be prepared to undertake. We are also revitalizing our amphibious assault capability with the construction of new amphibious ships and air cushion landing craft.

Over the past ten years, the Soviets have significantly increased both the quantity and quality of their aircraft. To maintain our qualitative edge in airpower, we are now producing advanced versions of the F-15 and F-16 tactical fighters, two of the finest aircraft in the world. We have also begun a large-scale acquisition program that will increase our intertheater airlift capability by 75% by the end of the decade.

Strategic Modernization. Dangerous obsolescence threatened all three legs of our strategic triad in 1980, challenging the stability of deterrence. When President Reagan took office, our newest long-range bomber was 19 years old. Our newest strategic submarine was 15 years old, and did not have missiles capable of destroying hardened Soviet targets. Our land-based missiles were increasingly threatened by huge, new, accurate Soviet ICBMs, while our own lacked the accuracy and destructive force we needed for continued deterrence.

Our strategic modernization program is now strengthening all three legs of the strategic triad, as well as our strategic command, control, and communications (C^3) systems. Three successful tests of the Peacekeeper missile have now been completed. Our first new strategic bomber in more than thirty years is in production; and TRIDENT II missiles now under development will provide our submarine force the increased payload and improved accuracy needed to assure effective retaliation against hardened targets. Finally, our C^3 systems are being modernized and upgraded.

At President Reagan's behest, we are also embarking on a bold new effort to develop a reliable defense against ballistic missiles. This will require many years, during which we will assess different technological options and secure the means to adopt the best. I believe it is the most significant step we can and will take to preserve peace with freedom and to pass on to our children the legacy of a safer world. It is a program that offers the hope of rendering nuclear missiles impotent. Removing this horror from the future is one of our highest priorities.

Management Reform. Upon taking office, we also discovered that the outdated defense procurement system contained few incentives to reduce costs or improve efficiency and failed to take full advantage of competition. Likewise, as investments in ammunition, spare parts, and new weapons and equipment were canceled, postponed, or stretched out, cost-efficient production became impossible. Many businesses decided to leave defense contracting altogether, further reducing competition and limiting our ability to mobilize resources in an emergency.

This Administration undertook a wide-ranging management reform program that included a thorough and forthright audit program to identify the sources of waste and inefficiency and a comprehensive acquisition improvement program to instill sound business practices in defense procurement. The extensive procurement reforms begun in 1981 are now paying dividends.

We are aggressively combating fraud and inefficiency. In the past fiscal year alone, 657 convictions and $14 million in fines, restitutions, and recoveries resulted from DoD and Justice Department cooperation. Our auditors, likewise, identified $1.6 billion in potential savings associated with greater efficiency.

We have taken firm steps to end the spare parts pricing abuses that we uncovered and reported. These reforms include tightening contracts, challenging high prices, obtaining refunds, continuing audits, and enhancing competition. Besides taking very firm and strict measures against irresponsible contractors and negligent employees, we are also rewarding those employees who come up with ways to save the taxpayers money.

To obtain lower costs and better quality, we are stressing greater competition in defense procurement; and advocates of competition are now working in all buying commands to challenge noncompetitive purchases. Already we are seeing results; for example, competition to supply aircraft spare parts has tripled. To assure continued competition, new contracts include provisions designed to provide the data necessary to seek second sources of supply in purchasing parts.

To maintain control over costs, the Defense Department is enforcing realistic budget estimates in order to halt the past practice of over-optimistic estimates that made a weapon system appear affordable, but left a legacy of cost overruns. The Department is also making the tough decisions necessary to eliminate marginal programs and maintain high-priority programs at stable and efficient rates.

Meeting the Challenges of the Future

In 1984, we will continue our long-term defense program, all the wiser for the lessons we have learned in the past three years, and confident that we are on the right course. But let us have no illusions: the next few years will be as crucial for America's defense program as they will be difficult.

In weighing the investments we must make, we cannot forget that the costs of maintaining a strong defense are easily measured. But the benefits are not. When we spend our savings on a new car, or a new home, we have acquired a tangible good. When we spend tax dollars on food stamps or federal highways, we have created a tangible result for all to see. But although we can count our missiles, or our tanks, or our men in arms, we can never really measure how much aggression we have deterred, or how much peace we have preserved. These are intangibles -- until they are lost.

Indeed, it is a paradox of deterrence that the longer it succeeds, the less necessary it appears. As time passes, the maintenance of peace is attributed not to a strong defense, but to a host of more facile assumptions: some imagined new-found "peaceful intent" of the opponent, or the spirit of detente, or growing economic interdependency.

As the bills that we as a nation put off too long continue to come due, it will be tempting to search for excuses to avoid the reckoning once more. We must not yield to that temptation. Already the Congress has cut back on our operations and maintenance budgets, threatening our improvements in readiness, and slowed down several programs, increasing the cost of what all agree we will need -- and courting the dangers inherent in taking too long to secure an effective deterrent. Already critics of the defense budget are discovering a new enthusiasm for weapons that are -- conveniently -- still on the drawing boards, even as they oppose procurement of hardware available now to strengthen our forces.

Unfortunately, we cannot make up for a decade of neglect in only three years of higher defense budgets. Restoring -- and then maintaining -- the military balance requires a determined and sustained effort. If we stop in midcourse, we will only endanger the progress we have made in recent years, and invite speculation by friends and adversaries alike that the United States can sustain neither its will nor its leadership.

By the same token, if we are allowed to continue on the path we have set, we can look forward to a time, only two fiscal years from now, when defense increases can begin to slow dramatically.

The Fiscal Year 1985 Annual Report to the Congress presents a prudent and responsible defense budget, and provides a thorough rationale for that budget. It shows that we arrived at this budget not by picking a budget number arbitrarily, but by weighing the threats and challenges to our interests, by refining our strategy for meeting those threats, and by identifying the capabilities we need to fulfill that strategy. The report also analyzes the resources available for acquiring those capabilities, and describes in detail the specific programs for which we are requesting funds.

Most importantly, the report is a document to help members of Congress in this coming year as they confront important -- and difficult -- budgetary decisions that will shape America's security through the end of this century. Over the past three years, the Congress and this Administration have worked together to rebuild America's defenses and restore our leadership in the world. We have made great progress. This year, let us again work together to preserve our gains and move closer to our goal of a stronger and more secure America, which is the best guarantee of a lasting peace.

Caspar W. Weinberger

Part I
Peace with Freedom

A. THE CHALLENGES WE FACE: PROTECTING U.S. INTERESTS IN A CHANGING WORLD

> ***"A safer world will not be realized simply through honorable intentions and good will . . . No, the pursuit of the fundamental goals our nation seeks in world affairs – peace, human rights, economic progress, national independence and international stability – requires a dedicated effort to support our friends and defend our interests. Our commitment as peacemaker is focused on those goals."***
>
> ***– Ronald Reagan***

For the United States, military strength will never be an end in itself; nor will military strength alone give us the means to achieve our ends. The freedom and prosperity we seek for ourselves, our allies, and our friends cannot be created or imposed by force. Just as American military strength could not itself produce economic recovery or restore democracy in postwar Europe, so American military strength alone cannot create national unity in Lebanon or raise living standards in the Caribbean Basin. But it is well to remember that without military strength, Europe would have been enslaved. Military strength gave Western Europe and Japan the necessary freedom to emerge, aided by American economic strength, as strong and free allies of the United States.

What force cannot create, it can destroy. If we lacked sufficient strength to deter or counter the hostile use of force, then we would have little chance of preserving the peaceful environment necessary for the freedom and prosperity we seek.

By the end of the past decade, serious doubts had arisen about both the will and the capability of the United States to maintain its "commitment as peacemaker" and exercise leadership in a changing world. Tensions within our alliances, rising levels of conflict in the Third World, and, most significantly, an ominous military buildup by the Soviet Union all posed serious new challenges to American defense policy. In our increasingly complex world, President Reagan's defense program is designed to meet these challenges, and to preserve peace with freedom.

1. Challenges Within Our Alliances

Twice in this century, the United States sought, and failed, to stand aloof from conflicts across the seas. From this experience we learned that maintaining a system of defensive alliances is necessary both to deter attack -- by demonstrating to any potential aggressors that they would face a united front of opposition -- and to share the burden of defending freedom.

Our commitment to collective defense has not diminished. However, as the Soviets expanded the capabilities and global reach of their military forces, the need for greater defense efforts by all members of our alliances subjected these alliances to new strains. The very success of deterrence through collective defense also opened it to question from some of those who have known nearly 40 years of peace between the great powers: was it really military strength that had prevented war, or was it some other factor, such as economic interdependence, peaceful intentions on the part of the Soviet Union, or the spirit of detente? Finally, the same freedom that these nations had united to preserve also produced an inevitable -- and public -- diversity of opinion, which some interpreted as disarray.

The events of the past year have demonstrated the underlying strength of our alliances. Reinvigorated U.S. leadership, including a strong commitment to rebuilding our defenses, forms the basis for more effective cooperation in deterring threats to our mutual security.

Despite pressure from an increasingly active disarmament movement, NATO has stood by its 1979 decision to deploy Pershing II and ground-launched cruise missiles in Europe in the absence of a negotiated solution to the threat posed by the Soviet monopoly of longer-range intermediate-range nuclear forces. We are working with our NATO allies in a special effort to improve our conventional defenses, and with our allies and neutral countries to control the loss of militarily applicable technology to the Soviet bloc. In Asia, Prime Minister Nakasone of Japan has reaffirmed his nation's intention to defend its territory, surrounding seas and skies, and sea-lanes out to 1,000 miles, and last summer, we and the Philippines successfully completed a review of the Military Bases Agreement, which provides us with unhampered use of major facilities in that important region of the Pacific.

Outside the formal alliance structure, we have also improved relations with our friends and those nations that support our mutual interests. For example, we have continued to expand our security relationships with Middle Eastern and Southwest Asian states. Our security was strengthened by restored good relations with Grenada and closer ties to other neighbors, and our Caribbean Basin Initiative is under way, holding out new promise in a vital region. We have developed a more substantive relationship with the People's Republic of China, and laid the foundation for closer and stronger ties with that powerful nation with its enormous potential.

2. Challenges in the Third World

Both an expansion of U.S interests in the Third World and an increase in Third World conflicts have forced us to focus more attention there.

About 30% of U.S. exports now go to the Third World, an increase of 20% since 1976 alone. In addition, we depend heavily on some of these nations for strategic minerals and energy resources. Our economy and the economies of our allies are, therefore, especially susceptible to disruption from conflicts far from our own borders. Vital ocean routes lie near or astride such turmoil-plagued areas as Southern Africa, the Persian Gulf, and the Caribbean. In 1982, for example, oil worth $106 billion traveled Pacific and Indian Ocean sea-lanes from the Persian Gulf, and almost half of all our overseas foreign trade tonnage passed through the Panama Canal and the Caribbean.

Causes of instability and conflict in these areas are many: ethnic and religious cleavages, irredentism and territorial disputes, rivalries for regional power and domination, and economic fluctuations and grievances. Although many of these problems are rooted deep in the past, the reach and intensity of Third World conflict in recent years have been exacerbated by the proliferation of technologically advanced weapon systems and, above all, by increased Soviet support -- both direct and through proxies -- for terrorism, insurgency, and aggression.

Chart I.A.1
Arms Proliferation in the Third World

	Number of Third World Countries with Advanced Weapon Systems	
	1960	1983
Armored Vehicles	38	104
Supersonic Aircraft	1	64
Missiles	6	74
Modern Warships	26	74

Recent events have highlighted how Soviet activity in these areas can threaten U.S. interests. The caches of Soviet-made weapons and equipment captured by U.S. and Eastern Caribbean forces on Grenada, as well as documents outlining Soviet-Grenadian cooperation, graphically demonstrated the danger of heightened Soviet involvement in our own hemisphere. Likewise, in Lebanon the U.S. component of the multinational peacekeeping force has faced challenges from Syrian-backed forces armed with Soviet weapons and equipment, including howitzers, surface-to-air missiles, and antiaircraft guns. In Afghanistan, Angola, Ethiopia, and Kampuchea, Soviet troops or Soviet-maintained proxy forces remain at the root of continuing conflict.

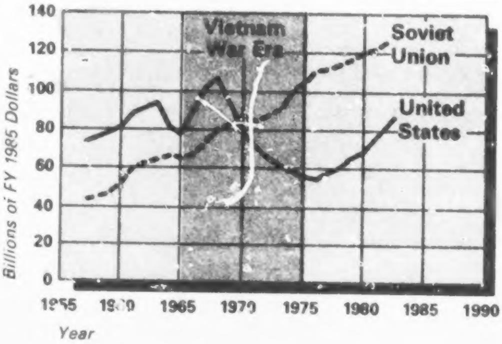
Fear that the Soviets may directly or indirectly exploit the vulnerabilities of developing nations has made many regimes in the Third World sensitive to the costs of opposing Soviet interests -- or of supporting ours. This increases the importance of our own security assistance and military training programs, which help these nations meet threats to their own security. It also points up the need for a credible U.S. capability to defend our citizens and vital interests in these areas.

3. Challenges from the Soviet Union

By the time President Reagan took office in January 1981, the expansion of Soviet military power and increasing evidence of the Soviets' willingness to use that power had forced the United States to begin reevaluating its defense posture. Earlier hopes that the Soviets would imitate our example of restraint, or that detente would discourage aggression, had all but disappeared. A majority of the American people and a bipartisan majority in the Congress advocated decisive action to rebuild U.S. military capabilities in order to reinforce the credibility of our deterrent strength, and to offer the Soviets a strong incentive to reduce tensions and armaments.

In last year's annual report, and in the 1981 and 1983 editions of Soviet Military Power, we described Soviet military efforts and the current structure of their forces. We also compared military investment and weapon production figures of the Soviet-bloc nations to those of the United States and its allies. These data portrayed a major Soviet military buildup over the past 25 years. A simple comparison of military investment (the procurement, military construction, and RDT&E programs that create a long-lasting stock of military assets) shows how the U.S. advantage of the 1950s and 1960s was reversed by the 1970s (Chart I.A.2). There are some signs that Soviet military investment may have grown less rapidly over the last few years than it had earlier; but their high level of military investment over a long period has enabled the Soviets to accumulate a stock of military assets much larger than our own. Soviet military research and development continues to grow rapidly, and a number of advanced new weapon systems appear to be nearing deployment. Heavy Soviet investment in military research and development, coupled with the purchase and theft of Western high technology, is most disturbing because it has eroded the qualitative advantage that the West needs in order to maintain the military balance.

Chart I.A.2
Military Investment[a]



[a] *(US outlays for military investment (procurement, military construction, RDT&E) compared to estimated cost of reproducing Soviet military investment activities in the US)*

What implications do these trends have for the security of the United States and the rest of the free world? To answer that question, we need to look at three major developments in Soviet military capabilities -- developments that pose new challenges to our defense policy:

- The Soviet military buildup, both quantitative and qualitative, has produced a major shift in the nuclear and conventional balance.
- The Soviet military posture has become increasingly offensive in orientation.
- The Soviets have significantly expanded the global reach of their military forces, enhancing their ability to project influence and power, especially in the Third World.

a. The Shift in the Military Balance

Twenty years ago, the United States was the preeminent military power in the world. Since that time, the steady Soviet military buildup -- together with the limits placed on our own defense spending, which actually declined by more than 20% in real terms during the decade of the 1970s -- caused this superiority to disappear.

Had the overall trends in the military balance been permitted to continue, the ability of the United States and its allies to maintain a credible deterrent posture in the years ahead would have been questionable. This, in turn, would have cast a shadow over the strategic calculations of other states threatened by Soviet power or tempted by Soviet overtures.

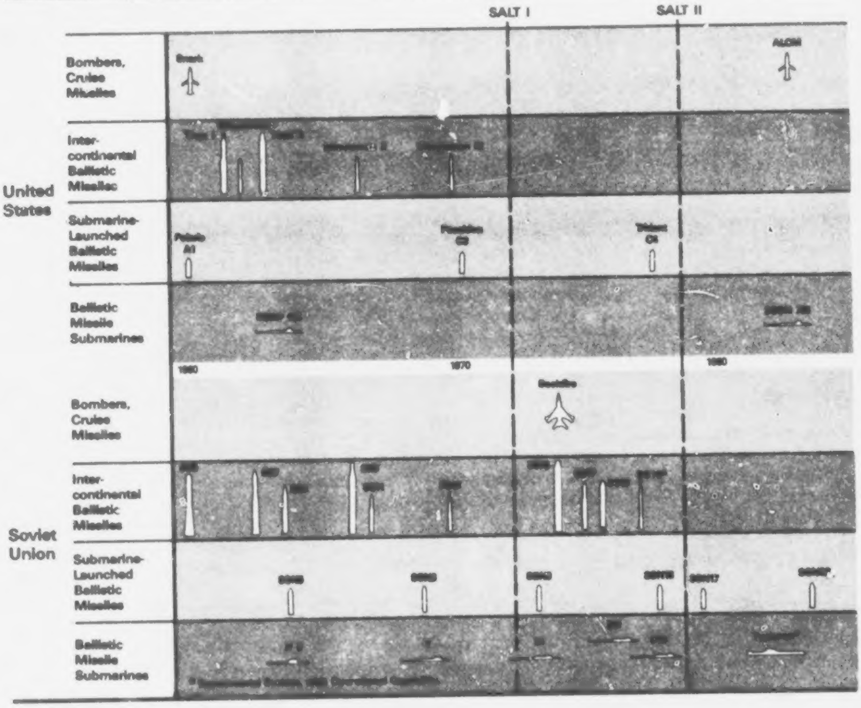
(1) Nuclear Forces

The Soviet drive toward superiority has been particularly pronounced in the realm of strategic nuclear forces. During the 1970s, the United States made a conscious choice to restrict its strategic force development, hoping to encourage similar restraint by the Soviets. Instead, they actually stepped up their strategic program. For example, the United States deployed its latest (and MIRVed) ICBM, the Minuteman III, in 1970. Since then, the Soviet Union has deployed four new classes of ICBMs and introduced seven major modifications to these systems. During that same period, the United States carried out only one significant ICBM upgrade (involving only about one-half of the Minuteman III force) and deployed no new types of ICBMs. More important, the newest Soviet ICBMs are accurate and powerful enough, and are deployed in sufficient numbers, to destroy most of our ICBM force in its underground silos.

The Soviets have also significantly improved their strategic sea-based forces. Between 1967 and 1980, the Soviets built and deployed some 70 new ballistic missile submarines (SSBNs) carrying more than 900 new missiles. In the same period, the United States also deployed new missiles, but on 1960s-vintage Poseidon submarines. By 1982, when we launched the modern Trident submarine, the Soviets had already introduced their new Typhoon SSBN.

This buildup of Soviet strategic nuclear forces shows no signs of slowing. Two new land-based ICBMs, two sea-launched ballistic missiles, a new strategic bomber, and new ground-, air-, and sea-launched cruise missiles are in advanced stages of development. The Soviets are also building new versions of the Bear bomber to carry air-launched cruise missiles, while continuing to add Backfire bombers to their inventory at the rate of about 30 per year.

Chart I.A.3
Introduction of Strategic Systems



In addition to building up their inventory of advanced weapon systems, the Soviets have improved their strategic defense systems. They are now upgrading their antiballistic missile (ABM) system around Moscow. (In contrast, we dismantled our ABM system at Grand Forks, North Dakota, in 1976.) They are also continuing an intensive research and development effort to develop defenses against ballistic and cruise missiles, and have improved their existing air defense systems, which are already the world's largest and most sophisticated.

The dangerous trend in Soviet strategic nuclear forces is compounded by similar trends in nonstrategic nuclear forces. The Soviets have already deployed 378 mobile and highly accurate SS-20 missiles, each of which has three warheads. (Refire missiles are also available for the SS-20.) The Soviets are also developing and beginning to deploy a new generation of short-range tactical ballistic missiles -- the SS-21, SS-22, and SS-X-23 -- that pose an increasing threat to NATO's rear areas and, therefore, to the survivability of NATO's air bases and seaports; command, control, and communications posts; and key nuclear and conventional forces, all of which are critical to the Alliance's ability to mount a coherent defense. The Soviets are also expanding the deployment of nuclear-capable artillery with their maneuver forces, and have begun forward-deploying their most advanced nuclear-capable tactical bomber to their air bases in Eastern Europe.

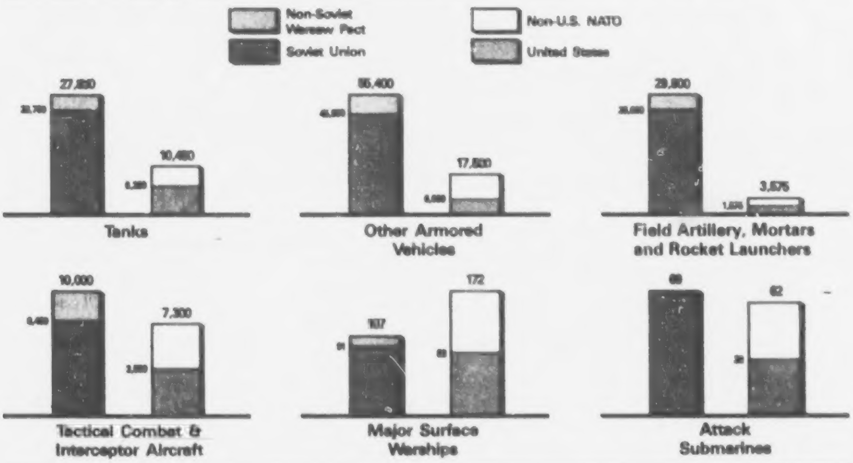
The buildup in Soviet strategic nuclear forces and the improvement in Soviet strategic defense systems threatened the credibility of our deterrent posture, which rests on the assumption that our ability to retaliate will cause the Soviets to perceive that the costs of aggression would be far higher than any possible benefit. Likewise, the growing imbalance in nonstrategic nuclear capabilities could potentially have led the Soviets to conclude that we would be deterred from fulfilling our commitment to defend NATO against attack.

It is against this background, which it is imperative for the American people to understand, that we must form and negotiate our arms reduction proposals. This is why we must secure agreement on reductions to equal levels that are fully verifiable. This is also why it is so misleading and dangerous to urge that we must have an agreement no matter what it provides, or to argue that the United States is being stubborn in insisting on equality.

(2) Conventional Forces

Since World War II, the Soviets have held an overall quantitative advantage in most conventional forces, and, as was noted in last year's annual report, in recent years they have widened this advantage in almost all categories by producing major weapons at rates exceeding those of the United States and its NATO allies combined.

Chart I.A.4
Production of Selected Weapons for NATO and Warsaw Pact Forces, 1974-83



Perhaps even more important, the quality of Soviet weaponry and equipment has improved significantly -- often through the purchase or theft of Western technology. The newest Soviet ground systems, for example, are comparable to many Western systems. Moreover, the Soviets have already fielded large numbers of their most advanced ground force systems, while equivalent U.S. systems are still being developed or just entering production. Measures of total combat potential, which take into account both numbers and quality of weapons, show that Warsaw Pact forces in the Central Region of Europe have improved by more than 90% from 1965 to the present, while NATO forces advanced by less than 40%. Simultaneously, the Soviets have engaged in a massive buildup -- in both numbers and combat potential -- of their ground forces opposite China; yet this buildup in Asia has in no way slowed the pace of their modernization in Europe.

Our reliance on tactical air superiority has been compromised by deployment of more sophisticated Pact aircraft that pose a threat to our ground and air forces and to our air bases. In addition, Warsaw Pact divisions are themselves protected by a complex and sophisticated air defense system. While we still have important advantages in the quality of our aircraft, and particularly in the quality of our pilots and support personnel, we can no longer expect to neutralize Warsaw Pact superiority on the ground by dominating the skies.

Recent years have also witnessed a dramatic expansion in Soviet naval capability, which poses an increasing challenge to the freedom of our sea lines of communication. Over the past decade, the Soviets have introduced seven new classes of major surface combatants, including a nuclear-powered cruiser, and five new classes of attack submarines with advanced missile systems capable of extremely long-range attacks. We believe the Soviets are also now building a mid-sized nuclear-powered aircraft carrier that will operate conventional take-off and landing tactical aircraft. When operational in the early 1990s, this ship will extend the reach of Soviet tactical aircraft beyond the limits presently imposed by their reliance on land bases.

Overall, the shift in the conventional balance has posed new challenges to our ability to offset the Soviets' quantitative superiority with our qualitative superiority, and has raised serious questions about our ability to halt a Soviet advance. This, in turn, has posed a new threat to collective defense, which remains viable only so long as the Soviet Union does not have such a preponderance of power that our partners fear the donsequences of maintaining our alliances.

b. Offensive Orientation

Soviet warfighting doctrine has never been defensive in nature. Even in the immediate postwar period, when the Soviets were less capable of mounting an offensive threat, they still maintained an offensively oriented doctrine emphasizing armored attacks, maneuver, and firepower.

Now, however, they have developed their military capabilities to the point that they can carry out a much wider range of offensive operations. This change is readily apparent in their weapon systems, with the classic example being improvements in their tactical aircraft. Once limited largely to protection of homeland airspace and Soviet ground forces from air attack, modern Soviet tactical aircraft are designed and equipped specifically for offensive operations against our ground forces. The increased speed, flexibility, and firepower of Soviet armored forces, and the deployment of heavy-lift vehicles that can rapidly move tanks and other heavy equipment to the front, also support a conventional "blitzkrieg" strategy. While the mission of Soviet naval forces remains to deny us control of the seas, they can now carry out these operations at a greater range and on a larger scale.

The threat posed by offensive chemical and biological weapons has also increased in the past several years. Soviet and surrogate forces are already using chemical and toxin agents in Afghanistan and Southeast Asia, while testing of new agents, experiments with means of delivering multiple agents, and development of a tactical chemical warfare doctrine continue. The Soviets also routinely use live chemical agents in training exercises.

Changes in tactics and training, while less visible than equipment modernization, also enhance the Soviets' offensive capabilities. For example, the Soviets are making significant changes in their air combat tactics and training programs by stressing pilot independence and initiative. It should be kept in mind, however, that while Soviet military writings have long emphasized the need to encourage these qualities in their military officers, in practice these reform efforts have been stymied by the rigidity of a society that discourages initiative from an early age.

Finally, two recent organizational changes highlight the Soviets' growing emphasis on offensive operations. They have established Operational Maneuver Groups (OMGs) -- flexible and highly mobile formations of up to corps size that would be used to penetrate and disrupt NATO's rear areas by taking advantage of surprise and moving forward rapidly. Likewise, a reorganization of Soviet air forces has produced reserve/strategic air armies. These self-contained "strike packages" are tailored for long-range conventional attacks against high-priority targets in Western Europe and the Far East; they can also be redeployed from one theater of operations to another as the strategic situation dictates.

c. The Global Reach of Soviet Military Power

Having long declared its global interests, the Soviet Union has now developed the military reach of a true global power. The Soviets have transformed their navy's role from limited coastal missions toward expansive "blue water" capabilities, have increased their ability to project force quickly to regions far from their borders, and have acquired access to naval facilities in crucial areas of the world.

The increasing size of Soviet ships, the greater number of days they spend at sea, and greater use of foreign naval facilities all highlight the Soviet navy's growing global mission. The growth in the Soviet merchant marine has added to the Soviets' military transport capabilities, as many of their merchant ships are configured (for example, with roll-on/roll-off capabilities) to support military missions. Their ability to replenish stocks of missiles, ordnance, and supplies while under way remains very limited, however. Hence, they would have difficulty sustaining protracted combat in regions distant from their homeland or from their overseas naval facilities.

The global reach of Soviet military power has also been extended by the growth in Soviet airlift forces, and by significant increases in the range and payload of both military and civilian transport aircraft. In the past two decades, the Soviets have doubled their total airlift capability, although they continue to face restrictions from their limited aerial refueling capability. (This has increased their dependence on overseas airfields; the loss of Grenada's airfield is potentially a significant blow in this regard). What is more, they have used this expanded capability during the 1973 Middle East War, and during the conflict between Somalia and Ethiopia. In Angola and Afghanistan, Soviet military airlift also played an important role. The Soviets have greatly improved their air assault capabilities, as was vividly demonstrated in the surgical assaults used to capture crucial sites in Kabul during the 1979 invasion of Afghanistan.

In some key areas, most notably the oil-rich Persian Gulf region, Soviet power projection would not require wide-ranging airlift or naval operations. Soviet ground and tactical air forces are directly available for cross-border operations. Although the rugged terrain in the area and logistical challenges would impose constraints on military operations, the Soviets have enhanced their ability to project power into the region with the recent modernization of their ground and air forces in the military districts opposite Turkey and Iran. Finally, with their growing presence in Afghanistan, Syria, Libya, South Yemen, and Ethiopia, the Soviets have, in effect, nearly encircled the Persian Gulf region -- the location of three-fifths of the world's proven oil reserves. That is why we and our allies must have the capability to deter any Soviet attempt to seize the oil fields, or to deny us access to and from them, and why we must acquire the capability to project our defenses to this vital area quickly and effectively.

The Soviets also pursue indirect military means to extend their global presence and apply pressure to local regimes. They use extensive military grants and sales, military advisors, internal security personnel, and even combat forces provided by proxies such as Cuba to increase their access to distant air and naval facilities. These airfields, ports of call, and logistic and maintenance facilities, in turn, permit Soviet aircraft and ships to extend their overseas presence, and can be used to support the delivery of military equipment or direct military intervention by the Soviet Union or its proxies.

We cannot know for certain why the Soviet Union emphasizes offensive planning, or why it has undertaken such an ambitious expansion and modernization of the types of forces considered unlikely to be used (e.g., nuclear), and in regions where war has been considered unlikely (e.g., Europe). The Soviets may not seek war, but their belief that conflict is a continuing possibility leads them to build forces designed to prevail in any war. Apart from hedging against the possibility of war, they undoubtedly also believe that establishing a position of military dominance will give them the leverage in peacetime that will permit them to achieve their aims without war. Whatever the reasons, the Soviets believe that their colossal military effort is worthwhile, notwithstanding the price it imposes on the Soviet society and its troubled economy.

We would ignore that effort at our peril. Indeed, the very purpose of the Soviet military buildup may be to discourage us from making a sufficient response to protect our deterrent, thereby subjecting ourselves and our allies to a defeat just as catastrophic as a military loss. It is this challenge that our defense programs must meet.

B. MEETING THE CHALLENGE: DEFENSE POLICY

While the world we face is complex and rapidly changing, the ultimate goal of American defense policy remains constant: the preservation of peace with freedom. The growing threat to our interests, the changing global environment, and the evolution of military technology dictate modifications in our military posture and capabilities. But the three underlying principles of our national security policy remain unchanged -- our commitment to deterrence, our defensive orientation, and our determination, should deterrence fail, to fight to restore peace on favorable terms.

1. Strengthening Deterrence While Working for Arms Reductions

Deterrence remains the cornerstone of our defense policy. We continue to seek nuclear and conventional capabilities sufficient to convince any potential aggressor that the costs of aggression would exceed any potential gains that he might achieve.

In determining the characteristics of a credible deterrent, however, we need to understand that deterrence is itself a dynamic condition. As the President's bipartisan Commission on Strategic Forces (the Scowcroft Commission) stated this past year:

> ***"Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis – not to determine what would deter us."***
>
> ***– Scowcroft Commission***

Unfortunately, we face an adversary whose leaders have, through their writings, force deployments, and exercises, given clear indications they believe that, under certain circumstances, war with the United States -- even nuclear war -- may be fought and won. As a result, we must make sure that, in calculating the risks of aggression, Soviet leaders recognize that our retaliatory capability offers them no opportunity to benefit from aggression. If the Soviets recognize that our forces can and will deny them their objectives at whatever level of conflict they contemplate, then deterrence remains effective and the risk of war is diminished.

During the late 1940s and early 1950s, America's virtual monopoly of intercontinental nuclear systems meant that the Soviet leadership understood that we might respond to a Soviet conventional attack on our allies with an atomic attack on the Soviet Union. As the 1950s ended, however, the Soviet Union began developing and acquiring long-range nuclear capabilities. As the Soviet capacity for nuclear and conventional attack continued to grow, the U.S. threat to respond to a conventional, or even a limited nuclear, attack with massive nuclear retaliation became less and less credible; hence, it was no longer a reliable deterrent. Accordingly, in the 1960s, the United States and its NATO allies adopted the concept of "flexible response," which sought to provide for an effective broad-based defense, including a strong conventional defense.

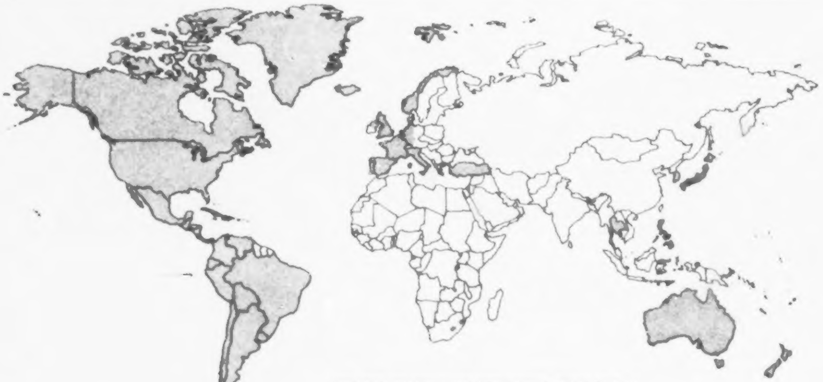
The Reagan Administration has emphasized the need for a stronger conventional deterrent in response to two incontrovertible facts. First, despite the improvements in conventional force posture undertaken in the context of the flexible response doctrine, NATO has continued to rely heavily on the nuclear deterrent. Second, the Warsaw Pact has strengthened its nonnuclear as well as its nuclear forces to a far greater extent than has NATO.

a. Conventional Deterrence

The United States cannot counter this Soviet threat by itself. To maintain a strong conventional deterrent, therefore, we participate in a collective defense that incorporates the strength of our allies in the defense of our mutual interests. To buttress our collective security, we maintain forward-based forces in Western Europe, Japan, the Philippines, Korea, and in waters adjoining those areas and Southwest Asia. We also provide for rapid reinforcement of our forward-deployed units by U.S.-based forces, and for timely response to contingencies in any region where we must defend our interests.

The United States has entered into several defense treaties over the years. The North Atlantic Treaty joins our fortunes to those of our 15 NATO allies. The Rio Pact and the Panama Canal Treaty recognize

Chart I.B.1
U.S. Defense Treaties



Note: Cuba and Nicaragua are formally members of the Rio Pact.

our common defense interests with most of the American republics. And the remaining defense agreements to which we are a party reflect our security interests in East Asia and the Pacific region: bilateral treaties with Japan, Korea, and the Philippines; the Manila Pact, which adds Thailand to our treaty partners; and the ANZUS treaty with Australia and New Zealand. The worldwide nature and growing magnitude of the threats to world peace make each of these agreements as important today as the day it was signed.

There are also many nations that, while not formally allies, share security interests with the United States. Increasingly, nations in all the regions of the world recognize the threat posed to their security by Soviet and surrogate expansionism. They are encouraged by the efforts we and our allies have taken to strengthen free-world defenses, and a growing number of them see a defense relationship with the United States as important for their own self-defense.

We are urging all of our friends and allies to do more in the common defense, recognizing that for many countries a strengthened ability to defend themselves is the most significant contribution they can make. U.S. security assistance helps to underwrite the efforts of those who cannot, by themselves, ensure their peace and security.

In addition, our security assistance programs complement and support U.S. forward deployments by contributing to the standardization and interoperability of equipment and to a collective understanding of tactics and operating procedures. Joint planning and joint training exercises with our allies further improve our capabilities for wartime cooperation.

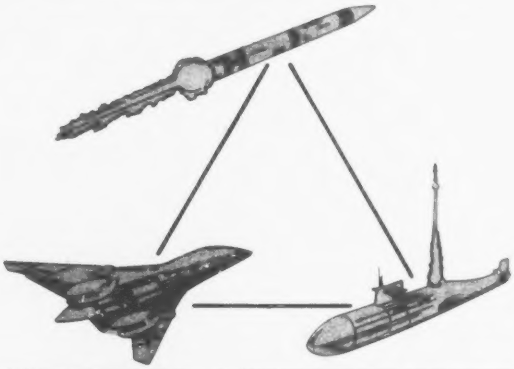
b. Nuclear Deterrence

Even if we ignored the direct and indirect role of nuclear forces in deterring conventional attack, in a world where the knowledge of nuclear weapons cannot be banished, the United States would still have to maintain nuclear forces to deter nuclear attack on its allies and on itself. That does not mean we are under any illusions about the dangers of a nuclear war between the major powers; we believe that neither side could win such a war. This recognition on our part, however, is not sufficient to prevent the outbreak of nuclear war; it is essential that the Soviet leadership understand this as well.

But while we work to preserve deterrence, we must also think about and plan against possible failures of deterrence. If deterrence should fail, we cannot predict the nature of a Soviet nuclear strike nor ensure with any certainty that what might begin as a limited Soviet attack would remain confined to that level. We must plan for flexibility in our forces and in our options for response, so that we might terminate the conflict on terms favorable to the forces of freedom, and reestablish deterrence at the lowest possible level of violence, thus avoiding further destruction. Of course, this concept of seeking to enhance deterrence and to limit the level of destruction by having flexible and enduring forces is not new. It has been squarely in the mainstream of American strategic thinking for over two decades.

Maintaining a stable strategic deterrent requires a multiplicity of retaliatory strategic forces -- a triad of land-based ICBMs, manned bombers, and submarine-launched ballistic missiles. The unique characteristics of the independent and separate components that make up the triad bolster deterrence by acting in concert to complicate Soviet attack planning, making it more difficult for the Soviet Union to plan and execute a successful attack on all these components while at the same time defending against their combined and complementary retaliatory effects. The triad also acts as a hedge against a possible Soviet technological breakthrough that could threaten any single strategic system. In addition to a strong triad, stability of deterrence in a crisis and the effective and responsible use of our nuclear forces depend on a responsive and survivable command, control, and communications system.

Chart I.B.2
U.S. Strategic Triad



Deterrence Through Diversity

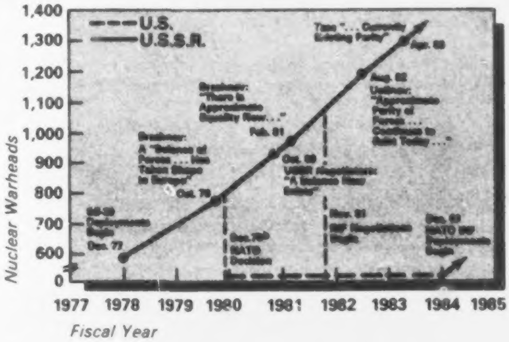
- Prevents Concentration of Soviet Resources
- Complicates Soviet Attack Planning
- Hedges Against System Failure
- Compensates for Soviet Technology Breakthrough
- Mutually Reinforcing

Finally, not content to rely on deterrence alone, we have through the President's leadership begun in earnest to search for a reliable and thoroughly effective defense against Soviet missiles -- a search that we believe can lead to a means of destroying Soviet missiles in flight, before they can destroy large parts of our world. Our plans to address this most promising hope for the security of the United States and our allies are set forth in greater detail on pages 57-59.

While America's strategic nuclear systems are NATO's ultimate deterrent force, we also have nonstrategic nuclear forces in Europe to help deter a Soviet nuclear or major conventional attack on our NATO allies. This deterrence is founded on NATO's ability to retaliate against the Soviet Union and its Warsaw Pact allies in Europe, and on a clear Soviet recognition that the use of nuclear weapons risks engagement of the strategic nuclear systems of the United States. All of our nuclear forces are governed by a single, coherent policy that links our conventional, nonstrategic nuclear, and strategic nuclear forces.

Soviet deployments of SS-20 longer-range intermediate-range missiles over the past six years, however, have eroded the credibility of NATO's deterrent posture. The SS-20 missile force, along with other Soviet intermediate-range nuclear forces, can reach Europe but not the United States. Unless countered by allied systems, these Soviet forces could tempt the Soviet Union to coerce Europe in peace or in a crisis in the hope that the United States would not respond. NATO's historic 1979 dual-track decision -- to deploy 572 cruise and Pershing II ballistic missiles but to seek cancellation or reduction of that deployment through an equal, verifiable arms reduction agreement -- was a studied and measured response to the rapid growth since 1977 of Soviet intermediate-range nuclear capabilities. At the time of the NATO decision, the Soviets already had 140 SS-20 missiles; over the past four years, they have added more than 230 and are continuing to construct new sites, all the while maintaining that this growth has not altered the military balance in Europe.

Chart I.B.3
Longer Range INF Weapons[a]



[a] Includes Soviet SS-20, SS-4, and SS-5 Weapons

[b] This Decision Called for LRINF Deployments at End of 1983 Unless an Arms Control Agreement Were Reached That Made Them Unnecessary.

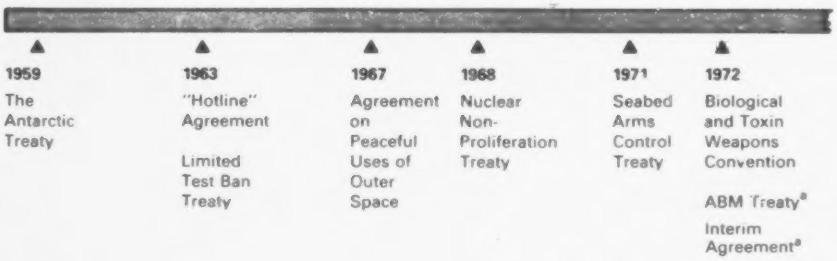
Meanwhile, NATO only began initial deployments of Pershing II and cruise missiles at the end of 1983. The NATO decision was and remains an Alliance decision, not a unilateral American one. It has been endorsed repeatedly at meetings of NATO defense and foreign ministers since 1979, and last fall the elected representatives of the countries on whose territory the new missiles are initially being based added their endorsement. That the first deployments of the NATO program began in December does not in any way imply a weakening of our resolve to conclude an arms reduction agreement covering these systems. On the contrary, the deployments represent an effort to convince the Soviet leadership that such an agreement would be in its interest as well as the Alliance's.

c. Arms Reductions

Since the advent of the nuclear age, the United States has demonstrated its commitment to far-reaching arms controls. This Administration is determined to achieve not just arms control, but genuine reductions.

In 1946, when the United States still had a nuclear monopoly, we presented the Baruch Plan to eliminate nuclear weapons entirely and to establish an international authority to govern the peaceful use of nuclear energy. The Soviet Union, however, rejected that ambitious proposal, and for more than a decade refused to accept any meaningful measure to control arms or enhance global stability. That impasse was finally broken with the signature of the Antarctic Treaty in 1959 and the Atmospheric Test Ban in 1963. Since then, we have concluded several bilateral and multilateral accords to limit the growth of weaponry, to prevent the proliferation of nuclear arms, and to reduce the danger of accidental or unintended conflict.

Chart I.B.4
Arms Control Agreements

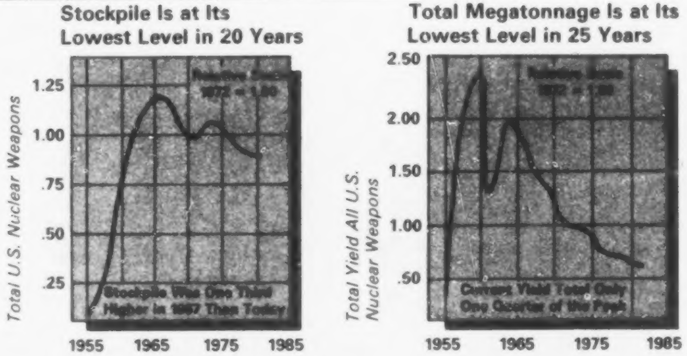

1959
The Antarctic Treaty
1963
"Hotline" Agreement
Limited Test Ban Treaty
1967
Agreement on Peaceful Uses of Outer Space
1968
Nuclear Non-Proliferation Treaty
1971
Seabed Arms Control Treaty
1972
Biological and Toxin Weapons Convention
ABM Treaty[a]
Interim Agreement[a]

[a] SALT I Agreements

We are committed to maintaining the lowest possible level of forces consistent with the requirements of deterrence. The United States had about one-third more nuclear weapons in 1967 than it has now. When NATO made its two-track INF decision in 1979, it reduced its stockpile by 1,000 nuclear weapons. Moreover, in October 1983, the NATO defense ministers decided that we could safely withdraw another 1,400 nuclear weapons from Europe over the next few years. Success at the negotiating table will allow us to reduce our nuclear weapons even further.

While the United States' commitment to enhancing global peace and security through effective arms control has never wavered, we have had to recognize the problems that have plagued earlier agreements and negotiations. Some accords -- such as the Nonproliferation Treaty and the Hotline Agreement -- have made a clear contribution to global security. Others have been much less beneficial. For example, the provisions of the SALT I and II agreements offered neither reductions nor stability in strategic nuclear arms. Instead, the SALT I framework allowed the

Chart I.B.5
U.S. Nuclear Arms Reductions



Stockpile Is at Its Lowest Level in 20 Years

Total Megatonnage Is at Its Lowest Level in 25 Years

Soviet Union to engage in an unprecedented expansion and modernization of its arsenal, which destabilized the strategic balance. The SALT II agreement would have codified that unilateral buildup and allowed additional growth in Soviet forces, thereby permitting even further deterioration of the military balance.

Besides the weak provisions in some earlier treaties, over the last few years a growing volume of evidence has been collected about Soviet violations of existing agreements. Several of these violations must have been planned by Soviet authorities many years ago, in some cases perhaps at the very time the Soviet Union entered into the agreements. For example, the Biological Weapons Convention (signed in Moscow in 1972 and ratified by the Soviet Union in 1975) requires that each party "never in any circumstances" develop, produce, or stockpile biological agents or toxins. As has become evident over the last several years, not only did the Soviet Union develop, produce, and stockpile such weapons, but it has actually experimented with them on human beings in Indochina.

In addition, the Soviets have violated the SALT II limits on encryption of missile test telemetry data and the Helsinki Final Act requirement for advance notification of certain major military exercises. A new, large phased-array radar that they are now constructing is an almost certain violation of the ABM Treaty. The Soviet SS-X-25 missile, currently under development, probably is a second new ICBM type, prohibited by the SALT II agreement; even if it is not a new type, it still violates SALT II provisions regarding the permitted ratio between the weight of an ICBM reentry vehicle and the missile's total throw-weight. Finally, it is likely that the Soviets have violated Threshold Test Ban Treaty limits on the size of underground nuclear tests, and they probably are deploying SS-16 missiles in violation of SALT II.

While these compliance problems underline the importance of effective verification of arms control agreements, they also show that verification measures alone will not ensure that treaties are respected. Above all, the Soviet Union must take a responsible attitude toward compliance and abide by its international commitments.

Our clear recognition of these problems has not made us any less dedicated to meaningful arms reductions. But we must work to ensure that future agreements avoid the problems of the past and make a real contribution to global security. As President Reagan said at the United Nations in September 1983:

> "Peace cannot be served by pseudo arms control. We need reliable, reciprocal reductions. I call upon the Soviet Union today to reduce the tensions it has heaped on the world in the past few weeks, and to show a firm commitment to peace by coming to the bargaining table with a new understanding of its obligations. I urge it to match our flexibility. If the Soviets sit down at the bargaining table seeking genuine arms reductions, there will be arms reductions. The governments of the West and their people will not be diverted by misinformation and threats. The time has come for the Soviet Union to show proof that it wants arms control in reality, not just in rhetoric."

In the Strategic Arms Reductions (START) negotiations with the Soviet Union, we seek to reverse the trends, which had continued through the SALT process, of ever-larger and more destabilizing Soviet arsenals. We have proposed that each side reduce its strategic ballistic missile warheads by about one-third, and redress the disparity in ballistic missile destructive capability and potential. While those goals remain central elements of our START proposal, we have made several major adjustments to our position since the negotiations began in June 1982 in order to facilitate an agreement.

For example, in October 1983, the President proposed a mutual guaranteed build-down of ballistic missile warheads. This proposal would encourage movement away from MIRVed ballistic missiles and toward more stabilizing, single-warhead missiles. To ensure reductions, the President's proposal also provided that each side would undertake net annual reductions of at least 5% of its current total of strategic ballistic missile warheads until it reached a floor of 5,000 warheads. At the same time, the President announced that we would be willing to discuss a build-down arrangement for strategic bombers, and to negotiate tradeoffs between areas of U.S. and Soviet advantage. All of those adjustments to our START position were made in close consultation with the Congress and the bipartisan Scowcroft Commission.

Unfortunately, the Soviet Union has not yet shown comparable flexibility, either by responding positively to our recent initiatives or by advancing more forthcoming proposals of its own. The Soviet START proposal would not impose the significant limits on ballistic missile warheads or on destructive capability and potential that are essential for a real contribution to security and stability.

At the conclusion of the most recent START round, the Soviet Union refused to agree to an opening date for the next round. We hope that it will soon do so and begin to negotiate seriously on the central issues of the talks. Although the two sides remain far apart in START, the Soviet Union has in that forum for the first time been willing to discuss reductions in strategic arsenals. It has also shown some limited flexibility on secondary issues during the course of the negotiations.

In the Intermediate-Range Nuclear Force (INF) negotiations, as in START, U.S. proposals have focused on the systems of greatest concern -- in this case, longer-range INF missiles. The proposal we put forward when the talks began in November 1982 called for the most desirable possible outcome: the complete elimination of these weapons from each side's arsenals. We continue to believe that this result would be the best for all concerned: for the United States, for the Soviet Union, and for all the states in Asia, the Middle East, North Africa, and Europe that are potential targets of the massive Soviet SS-20 force.

The Soviet Union, however, was not ready to accept such an agreement. So, in March 1983, the President proposed an interim accord that would reduce U.S. and Soviet longer-range INF missile warheads to substantially lower, but equal, levels; he later suggested a specific global limit of 420 warheads on each side. In September 1983, the President offered yet another important initiative designed to move the talks forward and to respond to several Soviet concerns. He agreed to consider proposals for limiting longer-range INF aircraft, to apportion any negotiated reductions in an appropriate manner between Pershing II and ground-launched cruise missiles, and to consider a commitment not to deploy in Europe all the missiles that we would be allowed under a global limit.

The Soviets, however, persisted in their demand that NATO be prohibited from deploying any longer-range INF missiles, while the Soviet Union continues to threaten our friends and allies with several hundred SS-20 warheads.

Because the Soviets have refused to consider any other proposal, in 1983 we began deploying the first NATO Pershing II and ground-launched cruise missiles on schedule, in accordance with the Alliance decision of December 1979. Both the Pershing II and the ground-launched cruise missiles have attained initial operating capability.

Meanwhile, the Soviets suspended the negotiations, without agreeing on a date for resumption. In effect, they walked out of the negotiating room. Nevertheless, we are hopeful that the Soviets will agree to continue the talks, now that they recognize that NATO is determined to restore the INF balance and that it will not accept a Soviet monopoly in longer-range INF missiles. We, for our part, are ready to continue to negotiate, and dismantle any and all of our Pershing II and ground-launched cruise missiles in accord with an equitable arms control agreement.

Outside the nuclear area, we and our NATO allies have been conducting negotiations with the Warsaw Pact in the Mutual and Balanced Force Reduction (MBFR) talks to reduce military manpower in Central Europe to equal and significantly lower levels. Our goal is an equitable and verifiable agreement that would bring each side down to a level of 700,000 ground force personnel and a maximum of 900,000 combined air and ground force personnel. At the NATO Summit in July 1982, President Reagan announced a new, comprehensive proposal for MBFR. Taking many Eastern concerns into consideration, the NATO participants in the MBFR talks then put forward a draft treaty -- the first time such a document had been proposed since the talks began in 1973.

In addition to arms reduction efforts, the United States is exploring ways to help prevent miscalculation in a crisis. These "confidence-building measures" are designed to complement the extensive unilateral steps the United States has taken over the last three decades.

Specifically, in November 1982, President Reagan proposed a set of new bilateral U.S.-Soviet confidence-building measures, to be negotiated in the START and INF talks, that would provide for advance notification of all ballistic missile launches and of major military exercises, and for an expanded exchange of data on both strategic and intermediate-range nuclear forces. In May 1983, the President endorsed the Defense Department's recommendations for additional bilateral measures to strengthen stability. Growing out of a year-long interagency study conducted in close cooperation with the Congress, those proposals called for the addition of a high-speed facsimile capability to the U.S.-Soviet Hotline, the creation of a parallel Joint Military Communications Link, and the establishment by the U.S. and Soviet governments of high-rate data links with their embassies in each other's capitals. We are now discussing these proposed communications improvements with the Soviet Union.

Such bilateral accords between the United States and the Soviet Union can make a clear contribution to controlling crises and preventing the possibility of unintended military conflict. Because broader multilateral measures also play an important role in enhancing stability, in May 1983 the President endorsed a Department of Defense recommendation for a multilateral agreement, open to all states, that would facilitate consultations in the event of an unexplained nuclear incident. This proposal would extend to all nations the U.S.-Soviet commitment to such consultations embodied in the 1971 Accidents Measures Agreement.

In January 1984, the United States and Canada joined the Soviet Union and 32 NATO, Warsaw Pact, and neutral European states in the Conference on Disarmament in Europe (CDE). The CDE focuses, in essence, on reducing the risk of surprise attack. It aims at militarily significant, verifiable measures that will make peacetime military activities in Europe more predictable and visible. We and our NATO partners in the CDE talks are proposing a cohesive set of measures to expand exchanges of military information and to provide for observation of military activities. We hope through these measures to reduce the risk that war could ever occur in Europe because of misunderstanding or miscalculation and to lower the danger that peacetime military activities might be used for intimidation or deception.

These various proposals are not meant to mark the end of a process, but instead to add momentum to the process already under way. We are continuing to explore all possible avenues to greater peace and stability, whether through nuclear or other arms reductions, improved communications, or other confidence-building measures. In all of those efforts, we are working closely with allied governments and with the Congress, benefiting from -- and fostering -- a renewed bipartisan consensus at home and a strengthened alliance system abroad.

2. Adding Credibility to Our Defensive Posture

Our policy is defensive. The United States does not seek new territory and uses its military force only in response to clear threats to stability and peace. We pursue this policy knowing fully that our defensive posture grants several military advantages to a potential aggressor. He can choose when, where, and how to attack. He can formulate a detailed plan for his operations to maximize his strengths and exploit our vulnerabilities. He can also mask his pre-attack mobilization efforts -- under the guise of training exercises or diplomatic crises -- so that we are faced with ambiguous advanced warning.

To compensate, we must work to improve our command, control, communications, and intelligence capabilities, so that we can detect an adversary's early war preparations and react appropriately to an attack or provocation. To ensure adequate warning, the Reagan Administration has undertaken programs that enhance the ability of both national command authorities and battlefield commanders to obtain more extensive and more timely information.

We have improved the readiness of our forces to respond quickly to an attack. Readiness levels have climbed substantially in the past three years, particularly in the important areas of manning, training, spare parts, and strategic mobility.

We have improved the capability of our Reserve Component forces by providing them with additional modern equipment and attracting to their ranks qualified and motivated personnel. Now they are better able to mobilize rapidly and deploy to the battle area in time to influence the outcome of a conflict.

We have sought to make our forces more flexible and mobile. Grenada reinforced a lesson from the 1982 war in the Falklands: we must not only structure our forces to cope with potential contingencies that we can foresee, but must also provide ourselves with the wherewithal to deal with the "unforeseen contingency." Our rescue mission in Grenada, at the request of the Organization of East Caribbean States and the Governor General of Grenada, and in response to the danger in which our citizens were placed, in no way impaired the readiness of our forward-deployed forces elsewhere.

While we concentrate on developing forces that could deal with those contingencies most threatening to the United States and our friends and allies, we cannot neglect, or be unprepared for, a wide range of lesser threats. We have therefore taken steps to reverse the steep decline in the size and capabilities of our Special Operations Forces, whose utility extends well beyond wartime operations. We are improving our lighter ground force units, both in terms of the firepower available to them and through innovations in tactics, doctrine, and specialized equipment. In addition, recent Army initiatives to standardize the organization of its light infantry divisions to 10,000-man structures will add to our strategic flexibility.

We are improving the mobility of our forces by obtaining sufficient airlift and sealift forces -- along with prepositioned equipment and supplies in key theaters -- to ensure that our forces can be rapidly deployed to areas of conflict. With new outposts in many regions of the world, the Soviet Union can now interfere with or threaten friendly nations, either directly or through its surrogates, in regions where we do not station forces in peacetime. Even in areas where we maintain forward deployments, lift forces and prepositioned materiel are essential to our ability to reinforce our units and to sustain them.

3. Restoring the Peace

This Administration has stood firmly by deterrence and a defensive orientation as the first two principles of defense policy precisely because we do not seek to achieve our national objectives by the use of force. The use of military force has become particularly dangerous in the nuclear age. As President Reagan has said on many occasions, including last September at the United Nations: "Nuclear war cannot be won, and must never be fought." Since there can be no winners in a nuclear war, we have no alternative to ensuring the absolute certainty of nuclear deterrence, and to making an unwavering commitment to reduce the dangers of nuclear war through effective arms reductions and the President's strategic defense initiative.

But credible deterrence, either nuclear or conventional, requires that we have the ability, in case deterrence fails, to halt any attack and restore the peace on terms favorable to us and our allies. And we must accomplish that while trying to limit the scope, duration, and intensity of a conflict. Obviously, U.S. forces are not available to defend everywhere against any threat at all times. Should deterrence fail, general strategic priorities, specific circumstances, and forces available at the time would govern force employment.

In seeking to limit the scope of a conflict, we would seek to contain the conflict and deny the enemy his war aims. Given the Soviet Union's ability to fight in more than one theater simultaneously, however, our planning must consider the possibility that war could spread to other theaters. To deter the Soviets from exploiting their global capability, the Reagan Administration has begun to restore our naval strength and to expand our airlift and sealift capabilities.

To limit the duration of a conflict, we must demonstrate to an adversary that nothing could be gained by trying to outlast us in a conventional war. To this end, the Reagan Administration has increased the sustainability of our forces and our investment in the defense industrial base so that we can rapidly expand and efficiently manage our production.

In seeking to limit the intensity of a conflict, we must be able to halt an attack and restore the peace by employing forces that do not require escalating the conflict to new dimensions of warfare. Since Soviet-bloc forces would probably enjoy numerical superiority in most theaters in which they might launch a conventional attack, we must be able to offset that advantage with qualitatively superior conventional forces. It is expensive for us to maintain this technological edge; however, it is essential if we are to avoid either the costs incurred by greatly expanded conventional forces or the risk of early reliance on nuclear weapons. Our entire conventional force modernization program is designed to maintain qualitative superiority, as is the U.S.-initiated effort in NATO to exploit newly emerging technologies.

4. Regional Objectives and Missions

To determine the size and type of military forces we require, we must also consider our regional objectives and the military missions necessary to achieve those objectives. Our planning for conventional forces centers on defending the three theaters of most critical interest to us -- Europe, the Middle East and Southwest Asia, and East Asia and the Pacific -- and on performing associated maritime missions. Although we also could use our conventional forces in other areas, and against lesser military powers, our planning has to be based on the assumption that there could be multitheater aggression by the Soviet Union with full participation by allies on both sides. This planning assumption has been chosen because it reflects actual Soviet force structure and strategy, and because it poses the most challenging test we could face in preserving our freedom.

a. Europe

The security of the United States is inextricably linked to the independence of the democracies of Western Europe. In recognizing this fact and the threat posed to both Europe and North America by the Soviet Union, the United States has joined with fourteen European nations and Canada in the North Atlantic Treaty Organization (NATO), our principal collective defense alliance. NATO's military forces -- strategic nuclear, intermediate- and short-range nuclear, and conventional -- form a bulwark of forces that allows NATO to deter aggression and, if deterrence were to fail, to respond credibly to any type of aggression. If the Warsaw Pact were to launch a conventional attack, NATO's primary objective would be to blunt the offensive and maintain the territorial integrity of the alliance, while restricting the conflict to the lowest possible level of violence.

In peacetime, the United States stations ground and air forces in Europe, and deploys naval forces in the Atlantic and Mediterranean. In time of crisis, we are prepared to reinforce these forward-deployed forces rapidly and heavily. Specifically, we have pledged to bring U.S. forces in Europe up to a total of ten divisions within ten days of a reinforcement decision, with corresponding increases in tactical aviation. Additional reinforcements would follow. The European NATO nations are prepared to round out their units with rapidly mobilized reserve personnel and to provide additional combat and support units. This would nearly double the strength of NATO's in-place forces.

Although the United States had been pledged to these missions for a number of years, we had not taken all the measures necessary to accomplish them. The Reagan Administration has begun the programs that will allow us to fulfill these missions by adding to our lift forces, increasing prepositioning, improving force readiness, and completing agreements with several European states for the provision of wartime logistic support to deployed U.S. forces.

An equitable division of the burdens and the benefits of the common defense remains a priority goal. The Reagan Administration has repeatedly urged our allies to improve their forces and to increase their expenditures for defense. In a broader context, we have encouraged our allies to participate where feasible in security operations in support of free-world interests in other important areas, and to facilitate and support the activities of the United States in this regard.

b. Southwest Asia and the Middle East

The primary objective of our policy for the Middle East is to deter Soviet aggression in that vital area. Our policy is designed to provide for the security of Israel, protect the territorial integrity of moderate Arab states, and work to achieve a lasting peace between the Arabs and Israel. As part of that policy, we are expanding our security relationships with regional states. In Lebanon, for example, we are committed to helping that country's government train and equip a force that can be used to assume control over Lebanese territory. Our goal in Lebanon remains the withdrawal of foreign forces, the reconciliation of the various political factions, and the development of a strong central government. Our security assistance programs further help to improve indigenous military capabilities, as well as maintain our security commitment to Israel.

For Southwest Asia, our objectives are to prevent influence or takeover by forces inimical to our interests, to assist regional states in strengthening their stability and maintaining their territorial integrity by improving indigenous defense capabilities, to preserve access to oil and other raw materials, and to develop closer security ties with moderate Arab states so that we can cooperate with them to resolve regional conflicts that threaten our mutual interests.

To meet these objectives, we must be able to project and sustain forces that could be called on to fight in support of friendly states. While considering the potential contributions of local states, our overall strategy for countering a Soviet move toward the Persian Gulf oil fields requires early participation by U.S. forces. If we are to achieve success, it is essential that we build up to the required levels the forces that could be made available to our new Central Command. So that a substantial increment of the Central Command's forces could be deployed early in a conflict, we must continue the strategic mobility programs we have started, continue to expand our access to facilities in the region, and selectively improve existing regional military facilities.

c. East Asia and the Pacific

U.S. national interests and security are closely linked to East Asia and the Pacific region. In time of war, our objectives include defense of U.S. territory and the lines of communication that connect us to our Pacific allies and friends. We would also help our allies protect themselves and their territory.

We intend to remain a Pacific power with the wherewithal to defend our interests in Asia. In Northeast Asia, we are encouraging our allies to take on more of the responsibility for defending themselves and thereby contribute to the defense of the region. We have urged Japan to develop within this decade the capabilities required to carry out its self-defense missions, including defending its sea-lanes out to a distance of 1,000 miles. We also remain committed to Korea's efforts to defend itself against the North Korean threat.

Elsewhere in Asia, we encourage and support the efforts of Thailand and the Philippines to strengthen their defense capabilities, and we continue our efforts to develop an enduring relationship with the People's Republic of China. We look to our ANZUS allies to continue their contribution to the security of the South Pacific, Southeast Asia, and the Indian Ocean. To support our regional policies, we depend upon security assistance, combined exercises, and military-to-military contacts to make the military forces of our friends in the region better able to operate with our own and thereby more capable of effective combined operations, should they ever be required.

d. South America, Central America, and the Caribbean

U.S. security interests in South America, Central America, and the Caribbean derive from the region's close geographic proximity to the United States, its strategic location astride vital shipping lanes, and its raw material resources. The Rio Pact and the Panama Canal Treaties are the cornerstone of our defense arrangements in this area. A friendly South America, Central America, and Caribbean region have in the past greatly reduced the need for defenses along the United

States' southern flank, and have helped to secure the critical Caribbean sea-lanes vital to U.S. security.

The region is also important to America's economic well-being. Major oil refineries and facilities for processing other raw materials are located in the Caribbean. Nearly half of our seaborne trade, as well as many strategic minerals, pass through the Panama Canal, the Gulf of Mexico, and the Caribbean. The Caribbean is the fourth largest market in the world for U.S. products and the region accounts for about one-third of all U.S. investments in developing countries.

The increased use of South Atlantic sea-lanes by oil tankers and other shipping important to our NATO allies has likewise enhanced the strategic importance of the adjoining regions of South America. This is reflected by the continuing increase in Soviet ship-days spent in South Atlantic waters.

A politically unstable region increases opportunities for Soviet-Cuban expansionism, and jeopardizes U.S. economic, political, and military interests. Because of the military buildup in Cuba and the extensive combat experience and training -- including amphibious exercises -- of Cuban troops, Cuba has the capability, with Soviet assistance, to project its power and subvert or coerce our friends and allies in the Caribbean and elsewhere. The military buildup in Nicaragua likewise exceeds rational defensive needs and is destabilizing to the regional balance. The arms and documents found in Grenada illustrate the scope and ambition of Soviet and Cuban penetration of this region, and validate our policies for these areas.

e. Africa

In Africa, our objective is to support the independence and stability of friendly governments and to ameliorate the conditions that lead to involvement in the region by rival outside powers. We also seek to preserve free access to Africa's mineral resources, some of which are essential for meeting defense and industrial needs of the Western nations.

We must deny the Soviet Union or its surrogates opportunities to make further inroads in Africa. Since important lines of communication run across or near Africa, our ability to deploy forces to nearby theaters such as Southwest Asia depends on gaining and maintaining access and transit rights (and working to deny them to the Soviets). To challenge the forces creating instability in Africa, we seek -- through a combination of our own efforts and greater cooperation from both our European allies and other powers -- to provide timely and appropriate security assistance that minimizes the burden on fragile African economies.

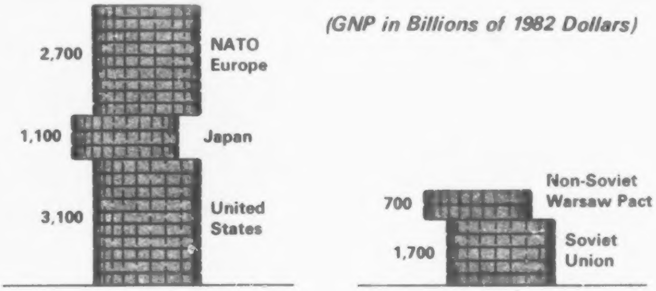
C. MEETING THE CHALLENGE: DEFENSE CAPABILITIES

When this Administration took office in 1981, we had to determine whether our capabilities were sufficient to carry out our defense policy. Our finding, to which a bipartisan majority in the Congress also subscribed, was that a decade's neglect of our defense posture had taken a severe toll. Declining military morale, precariously low stocks of spare parts and munitions, and obsolescent equipment and facilities all called into question our ability to counter -- and, therefore, to deter -- threats to our interests around the world.

In effect, the President and the Congress were faced with a double duty. First, we had to act quickly to improve the basic readiness and staying power of the forces we had, so that if an immediate crisis were to arise, we would be ready to meet it. But, at the same time, we had to recover lost years of investment by increasing research and development and by modernizing and strengthening both our conventional and our nuclear forces.

Pursuing these dual goals is not easy or inexpensive. But neither is it beyond our means. In recognizing our areas of weakness, we should not forget our strengths, particularly the enormous economic strength of free societies. The combined gross national products (GNPs) of the United States, its NATO allies, and Japan are nearly triple those of the Soviet Union and the other Warsaw Pact states -- a tremendous advantage in resources. And while U.S. defense spending has now risen from the low levels of the 1970s, in real terms it still draws upon a small portion of our total resources. The FY 1985 defense budget will require 6.8% of our total GNP, as compared to an average of more than 8% during the 1950s and 1960s -- not a high price when one considers the cost of failing to deter or defeat aggression.

Chart I.C.1
Comparative Economic Base (1982)



We have never sought to match the Soviet Union or the Warsaw Pact unit for unit, system for system, or soldier for soldier. Our alliances are more robust than theirs, since our allies join us willingly, while the Soviet Union guarantees loyalty by menacing its "friends." Our troops are more highly motivated than theirs, since our forces are prepared to fight for the freedom that the Soviet Union and its allies deny to their own citizens. Free enterprise and innovation have given our military forces a technological edge. And finally, with a flexible strategy, we can effectively deter aggression in many areas without having to maintain significant levels of forces in all of them simultaneously.

But we cannot depend on the strength of our friends and allies if we are not willing to maintain our own defense effort, or our commitment to joint ventures and security assistance. We cannot rely on the superior quality of our men and women in uniform if we are not willing to give them the compensation they deserve, or the tools they need to do their jobs. We cannot assume that we will keep our technological edge unless we continue developing and modernizing our equipment and halt the hemorrhage of technology to the Soviet Union. We cannot retain the benefits of flexibility without training and equipping our forces to respond to different types of contingencies. Above all, we cannot escape the responsibility of retaining forces of sufficient quantity and quality to make our deterrent credible at all levels of conflict.

After three years of sustained effort, we have made significant progress in restoring the credibility of our forces and demonstrating our determination to preserve our deterrent strength. The following sections describe the progress we have made in upgrading our defense capabilities and the programs we must follow to maintain our conventional and nuclear deterrents in the years ahead.

1. Readiness

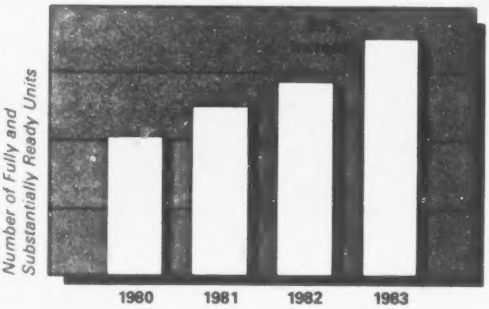
When this Administration took office, years of underfunding readiness had left our forces unprepared to respond quickly and reliably in a crisis. Far too many of our active combat units were not ready for combat, including about one quarter of the Army's combat units, two-fifths of our major ships, and one-third of our naval aviation squadrons. About one-quarter of the Marine Corps' ground units were rated as only marginally ready to perform their combat missions. Training had been cut back. Flying hours for Air Force tactical fighter pilots, steaming days for ships, and battalion field training days -- key indices of readiness -- were alarmingly low.

The deteriorating condition of our installations and repair facilities exacerbated the problem. Inadequate funding, inflation, and the advancing age of our facilities made working and living conditions for many of our people, especially those in Europe, deplorable. Lowered morale among our personnel, living in poor housing and working in rundown facilities, had seriously weakened our logistic effort.

Conditions in the Reserve Components, which suffered from manpower and equipment shortages, were worse than those faced by the active-duty military. The historic practice of equipping these units with outmoded or "hand-me-down" hardware, with insufficient regard to their wartime missions or deployment schedules, made their combat effectiveness dubious at best. By 1979, the trained manpower strength in Selected Reserve units was 237,000 below that required in time of war.

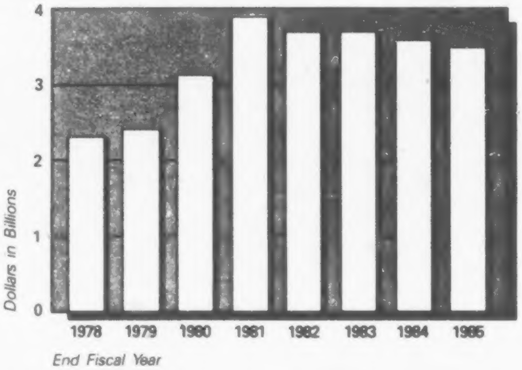
We acted quickly to improve the readiness of our conventional forces. In one of the first initiatives taken by this Administration, we recommended, and the Congress agreed, to increase substantially the funds devoted to force readiness -- adding $3 billion in FY 1981 and $9 billion in FY 1982. Between December 1980 and September 1983, the number of major active and reserve units that were at least substantially ready increased by 39%.

Chart I.C.2
Readiness Trends
(End of Year)



We already have greatly improved the materiel readiness of our forces -- the condition of their weapons and equipment. Funding for readiness increased by 28% between FY 1980 and FY 1984, and the

Chart I.C.3
Backlog of Maintenance and Repair of Installations



President's budget for FY 1985 contains an additional 12% growth. We acquired critically needed spare parts, reduced repair backlogs, and purchased essential tools and supplies. In addition, construction, repair, and real property maintenance projects totaling some $41.3 billion over the FY 1981-84 period have begun to alleviate the unacceptable working and living conditions we inherited, and we plan to continue our emphasis on this area with $14.5 billion in FY 1985.

With the support of the Congress, our initiatives to provide fair and competitive levels of compensation have raised the overall quality and experience level of the men and women in our armed forces. In our initial budget proposals, we provided for an average 14.3% pay raise for military people in 1982. Additionally, special and incentive pays have contributed to reducing shortages in key skill and leadership categories, and to retaining career personnel.

Today, we have a force that is more fully manned with higher-caliber men and women. During the past year, all of the Services met or exceeded their recruiting objectives; 91% of our non-prior-service recruits were high school graduates, up from 68% in 1980. Retention showed similar gains, with almost 68% of all eligible personnel having chosen to reenlist in 1983, up from only 55% three years earlier. Fill rates for specialty occupations have improved significantly since the end of FY 1980.

Today's reserve forces are also in much better condition than they were when this Administration took office, although some equipment problems persist. Our policy is to give equipment priority to those units that will be "first to fight," whether active or reserve. Selected National Guard units are receiving our most modern armor, the Abrams tank and the Bradley fighting vehicle. Air defense capabilities of reserve forces are being upgraded: some Air National Guard and Air Force Reserve units are now flying F-16 fighter aircraft, and the Naval Air Reserve will receive the new F/A-18. The Naval Reserve is operating the new Perry-class guided missile frigate. Manpower strength is up across the board. For example, in the past year the strength of the Selected Reserves rose to over one million for the first time since 1961.

The revitalization of our armed forces is one of the most important achievements of the Reagan defense program. It reflects not only better pay and benefits, but also increased recognition by our servicemen and women that it is an honor to wear the nation's uniform. But we cannot afford complacency: the declining number of service-eligible young men and women in the years ahead, and a rapidly improving economic picture, could have a significant effect on recruiting and retention unless we give continuing attention to personnel compensation.

Likewise, we have made significant improvements in training. Between December 1980 and September 1983, we halved the number of active units rated "not combat ready" because of inadequate training.

While we are gratified by the dramatic successes we have achieved over the past several years in restoring the readiness of U.S. forces, we must remember that readiness is a perishable commodity. We cannot adopt the attitude that we have now "fixed" readiness and can move on to other problems. Although we no longer need year-to-year percentage increases in readiness funding as large as were necessary in FY 1981-82, we must continue to pay our readiness bills to avoid slipping back into the dangerous posture of the recent past. This

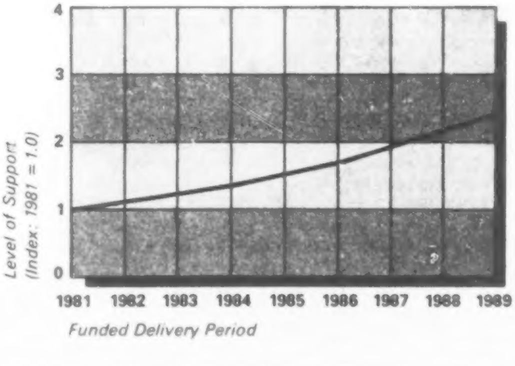
Administration is committed to maintaining and, indeed, to improving the readiness of our forces.

2. Sustainability

Not only did we find our forces unprepared to respond quickly in an emergency; we found they were not supplied to sustain operations for very long. Because funding levels in previous budgets were often insufficient to meet even peacetime consumption, our stockpiles of munitions and secondary items were inadequate for combat operations, and our ability to engage in combat on a large scale at high intensity would have been very limited. The Warsaw Pact, by contrast, had been building its stockpiles for several years and, therefore, could outlast us in conventional combat.

We have made significant progress toward redressing critical deficiencies in sustainability by funding large increases in this area over the past three years. During the very first days of this Administration, we requested and received from the Congress about $3 billion in additional sustainability funding for FY 1982 -- a 30% increase over the previous Administration's FY 1982 request. Total sustainability funding for the next three years, including the request for FY 1985, will be nearly double that of President Carter's last three budgets (FY 1980-82) in constant dollars. When the munitions and secondary items procured by the FY 1985 budget are delivered to the field, the Reagan Administration will have increased stockage levels and other measures of sustainability by almost 50% over the levels it inherited. By the end of the decade, our munitions sustainability is projected to be more than double the 1981 level.

Chart I.C.4
Estimated Munitions Sustainability



3. Modernization: Maintaining a Qualitative Edge

Having taken steps to restore the combat readiness and sustainability of our conventional forces, we continued with initiatives to provide our forces with the equipment needed to counter growing Soviet capabilities. We were faced with two grave problems. First, many elements of our conventional forces -- both active and reserve -- suffered from shortfalls of major equipment such as armored personnel carriers, aircraft, and missiles. Second, much of the major equipment we did have -- even in our front-line combat units -- was aging and essentially obsolete compared with new Soviet hardware. Spending reductions of the 1970s had forced the Services to retain some equipment, procured before and during the Vietnam conflict, beyond its useful lifespan. In contrast, the Soviet Union continued to build great numbers of capable, modern weapons. By 1980, the Soviets had fielded a new generation of equipment with equal, and in some cases superior, capabilities compared with our front-line weapon systems.

In the past three years, we have begun a major program to modernize our conventional forces. We started by correcting the deficiencies found in the previous Administration's proposed budget for FY 1982, by:

-- Restoring funding for several needed weapon systems that would have been terminated in that budget (e.g., the Army's M-88 recovery vehicle, the Navy's amphibious lift ships and MK-48 torpedo, and the Air Force's KC-10 tanker/cargo aircraft.)

-- Increasing funding for other weapon production programs that had been budgeted at low and inefficient -- and thus more expensive -- rates (e.g., the Army's M-2 Bradley fighting vehicle system and UH-60 Blackhawk helicopter, the Navy's EA-6B Prowler electronic warfare aircraft and AIM-9 Sidewinder missile, and the Air Force's F-15 and F-16 fighter aircraft.)

-- Funding or accelerating several weapon development programs that promised to provide a means of maintaining and, in some cases, regaining the technological edge we had enjoyed over our potential adversaries (e.g., the Army's antitactical missile capability and terminally guided submunitions, the Navy's High-Speed Antiradiation Missile (HARM), the Marine Corps' AV-8B Harrier V/STOL attack aircraft, and the Air Force's advanced tactical fighter technologies program and synthetic aperture radar system).

The FY 1985-89 program continues our commitment to providing up-to-date, capable systems that will enable our forces to counter a numerically superior and qualitatively improving opponent. While we recognize that we cannot afford to reach for the most advanced systems in all cases, we also cannot afford to be tempted by the ill-informed call to procure only small, light, inexpensive, unsophisticated equipment. The equipment that will effectively meet an increasingly sophisticated threat is what we seek and have sought. We will not ask our soldiers, sailors, marines, and airmen to fight superior numbers with inferior equipment. We must also continue to seek ways to make obsolete major portions of the Soviet Union's existing inventory, through flexible and innovative tactics, operational expertise, and improved weapon technology.

Our development and procurement efforts emphasize characteristics in new weapons that will maximize their capabilities worldwide, and in various types of conflicts.

-- We are devoting substantial resources to improving the responsiveness and flexibility of our forces. Further, through improved surveillance and communications systems, we will be better able to bring our combat power to bear at the right place, and with minimum delay, even though conditions on the modern battlefield will be changing rapidly.

-- We are developing equipment that can operate in different climates, over different terrain, in daytime or at night, and in all types of weather.

-- We are emphasizing increased ranges and speeds for major elements of our forces, including submarines, tactical aircraft, air-delivered ordnance, antiship missiles, and artillery.

In the next portion of this chapter, we will address our modernization efforts with respect to each major component of the force structure. In each case, we will discuss the mission of these forces, and how their modernization responds to the challenges posed by improvements in Soviet military forces.

a. Land Forces

Our land forces must provide the capability to engage an enemy at all levels of conflict -- from counterterrorist operations to full-scale armored and mechanized warfare. The latter poses the most serious challenge, especially for those forces committed to the forward defense and rapid reinforcement of NATO. Meeting that challenge falls primarily to the largest component of our active land forces -- the Army's armored and mechanized divisions. They are designed and equipped to counter the Soviet-bloc armies -- a modern, tactically mobile, and firepower-intensive opponent.

Ninety-four Soviet divisions threaten the NATO alliance in central and northern Europe. An additional 16 divisions in interior Soviet military districts and 55 active Warsaw Pact divisions are available as reinforcements. Soviet and surrogate forces also threaten our interests and friends in Southwest Asia and challenge our forces or those of our allies in Northeast Asia. Virtually all Soviet divisions are either motorized rifle or armored divisions. The threat to NATO alone consists of roughly 47,000 tanks, 72,000 other armored vehicles, and 27,000 field artillery pieces. These forces are improving qualitatively; for example, Soviet tanks are being upgraded with a 125mm smoothbore gun that has a higher muzzle velocity and fires a larger round than our current 105mm main tank gun, and Soviet artillery units are being modernized with new self-propelled 122mm and 152mm howitzers.

To meet this threat, we must improve the antiarmor capability and tactical mobility of our forces, as well as provide them with better command, control, and communications (C^3) support. The M-1 Abrams tank, M-2/3 Bradley Fighting Vehicle (BFV), and the AH-64 Apeche attack helicopter provide potent additions to our antiarmor capability. The M-1's superior agility, advanced fire control system, and better armor will enable it to stand up to and defeat the Soviet armored threat on the battlefield. The number of TOW antiarmor missile systems on the battlefield will increase dramatically with the introduction of the TOW-equipped Bradley vehicle. The Apache helicopter will employ the new, and highly effective, Hellfire antiarmor system.

Battlefield mobility provides us with an effective means of countering a numerically superior opponent. Mobility can allow an outnumbered force to concentrate men and materiel at a crucial time and place in order to exploit the enemy's vulnerabilities. We continue to place high priority on the tactical mobility of our conventional land forces with the acquisition of the UH-60 Blackhawk utility helicopter and the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The Blackhawk, in addition to being more maneuverable and less vulnerable than the Vietnam-era UH-1 "Huey," provides us with a capability to lift an entire rifle squad (eleven combat-loaded troops); the UH-1 could lift just six to eight combat-loaded troops. The HMMWV provides our land forces with a five-fold increase in payload over the smaller jeep it replaces, with much greater reliability and cross-country mobility.

Future battlefields promise to be cluttered and confusing, with a rapidly changing tactical situation brought about by highly mobile opposing forces. Improvements in commanders' ability to see, shape, and manage this modern battlefield are being provided by lightweight, jam-resistant C^3 systems that will be fielded during the mid- to late 1980s, such as the Joint Tactical Communications (TRI-TAC) system. TRI-TAC will provide high-quality and reliable switched communications service to tactical users at all levels.

b. Maritime Forces

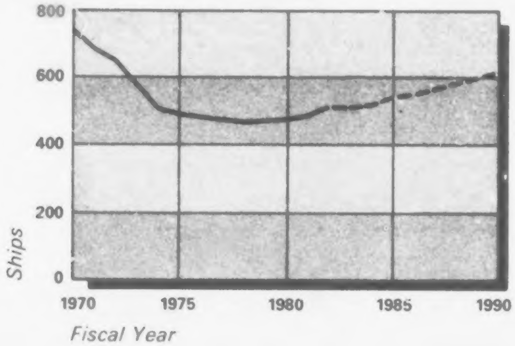
Strong maritime forces are an essential element of our national strategy. Among their most important missions, in peace and war, are the protection of vital sea-lanes that we would need to honor our defense commitments in Europe, Southwest Asia, and Northeast Asia. Maritime forces also support an active defense of the littoral countries with whom we maintain collective defense alliances, such as the nations on NATO's northern and southern flanks. Indeed, their global reach, responsiveness, integrated force structure, and self-sustaining capability make maritime forces particularly useful in responding to a wide variety of crises.

Over the past two decades, the Soviets have engaged in a sustained and determined effort to undermine Western maritime defense capabilities. Soviet antiship cruise missiles, especially those launched from long-range bombers and submarines, pose a serious threat to our naval forces. To carry and launch these antiship missiles, the Soviets continue to build the Backfire bomber, which can threaten our naval operations over a large part of the world's ocean area. New antiship missiles with longer ranges, higher velocities, and more elusive flight profiles have also complicated our maritime air defense tasks. Their greater range makes it more difficult for our fighters to destroy Soviet bombers before they reach missile-launching positions. The faster speeds and elusive flight profiles of the Soviet missiles themselves greatly complicate the task of our shipborne interceptor missiles.

New submarine types -- such as the Oscar SSGN, the improved Victor III SSN, the Alfa SSN, and other new classes that may appear in the near future -- have various combinations of faster speed, quieter operation, deeper diving capability, and greater weapon loadings. This has increased the threat to our naval forces and shipping, and has made it more difficult for our antisubmarine warfare forces to find and engage Soviet submarines, already the largest undersea force in the world. At the same time, the Soviets are improving their submarine-launched antiship missiles by extending their range and increasing their speed and targeting capabilities.

To meet this growing Soviet challenge, and to maintain a strong maritime defense, we have begun a major expansion of the Navy from the 479 deployable battle force ships we inherited to a fleet of 600, including 15 deployable aircraft carriers. If the Congress sustains our plans, we expect to reach our goal of a 600-ship Navy in FY 1989.

Chart I.C.5
Deployable Battle-Force Ships



We also have taken measures to counter the qualitative improvements in Soviet maritime forces by continuing to upgrade the capabilities of our carrier battle groups, nd improving our maritime command and control system. We have also strengthened our ability to defend vital sea-lanes against air attacks by developing tactical over-the-horizon (OTH) radars that can detect enemy aircraft at distances of up to 1,800 miles. The earlier warning afforded by these new surveillance radars will enable us to use land-based interceptors and airborne early warning aircraft more effectively in maritime air defense missions. Two new classes of ships, the CG-47 cruiser and the DDG-51 destroyer, incorporate the Aegis air defense system with its advanced detection and fire-control capabilities for intercepting high-speed cruise missiles after launch.

We are likewise upgrading our antisubmarine warfare capabilities. Construction of improved versions of the highly capable SSN-688 Los Angeles-class attack submarine continues, and we are designing a new class of nuclear attack submarines. New towed-array sonar systems deployed aboard surface warships, coupled with new LAMPS MK III Seahawk helicopters, will allow our surface forces to detect and engage quieter and faster Soviet submarines armed with long-range weapons before our ships can be targeted. We are also augmenting our long-range ocean surveillance systems and modernizing our force of land-based P-3 maritime patrol aircraft in order to improve our capability to locate and destroy enemy submarines in forward areas before they come within range of our naval forces and convoys. Improved torpedoes and antisubmarine rockets now in production or under development will provide capabilities needed to counter the new Soviet submarines.

We are also revitalizing our amphibious assault capability with the construction of new amphibious ships and landing craft. By the middle of the next decade, our lift forces will have grown in quantity by roughly one-third, while gaining a capability to launch assaults from points over the horizon, where ships would be less vulnerable to enemy attack. Our program will also help avoid the block obsolescence that would otherwise have overtaken our amphibious capability in the 1990s. Together, these measures will maintain our capability to employ Marine Corps units in response to crisis situations, while providing a mobile offensive landing force in time of war.

To improve gunfire support for Marine operations ashore, and generally enhance options for responding to threats overseas, we are continuing our program to refurbish four battleships. These vessels provide us with massive firepower in coastal areas and are well-protected against attack by torpedoes and cruise missiles. Our recent experience with the New Jersey off Lebanon has demonstrated their capability.

c. Tactical Air Forces

The worldwide nature of the threat and of U.S. interests and commitments requires that our Air Force and Marine tactical air forces be capable of operating from forward bases in Europe and the Pacific, of rapidly reinforcing these bases, and of maintaining the capability to deploy and operate in other regions where conflict may begin. Carrier-based aircraft add to our capabilities by allowing us to project tactical air power in regions where we cannot depend on access to land bases.

Over the past decade, the Soviets and their allies have continued to make significant improvements in both the quantity and quality of their air forces. They now have an inventory of several thousand modern fighter, attack, and bomber aircraft that can seriously contest us for air superiority and pose a significant threat to our ground- and sea-based forces. The qualitative parity represented by the MiG-29 and Su-27, two new supersonic, all-weather, night-capable fighters, will significantly reduce our current tactical air advantage, as will the introduction of "Mainstay" -- the AWACS of the Soviet air forces. Furthermore, these new aircraft are complemented by a formidable array of ground-based air defense systems, which would restrict the ability of our aircraft to operate at low altitudes in support of ground operations.

Air superiority remains a critical linchpin in the air, sea, and ground battle; without it, our forces are subject to attack by enemy aircraft. To retain our qualitative edge in this area, we need high-performance fighters that can detect and identify enemy aircraft in all types of weather and at long ranges, shoot first, and engage multiple targets in rapid succession. To achieve these capabilities, we must continue to purchase F-14, F-15, F-16, and F/A-18 fighter aircraft and improve their reliability and maintainability so that they will be able to remain operational for longer periods. We are also equipping them with the Advanced Medium-Range Air-to-Air Missile (AMRAAM), which will improve the F-14's and F-15's air-to-air combat effectiveness and give the F-16, for the first time, a capability to engage targets beyond visual range. It will also enable the F/A-18 to attack fighters and fighter-bombers from standoff ranges.

To counter the growing Soviet threat to our sea-based forces, we must upgrade our primary fleet air-defense fighter, the F-14, and improve its long-range Phoenix missile. The F-14 upgrade will make its air combat performance more competitive with the new, high-performance

Soviet fighters. The Phoenix improvements will make it better able to cope with the increasing electronic countermeasure threat posed by newer Soviet bombers and air-to-surface missiles.

d. Mobility Forces

Only with a rapid deployment capability is our strategy of collective defense likely to succeed. Throughout the 1970s, planning for mobility forces, including airlift and sealift forces, focused primarily on reinforcing one theater at a time. As Soviet capabilities for simultaneous conflict in several theaters grew, it became apparent that we needed to develop the capability to conduct concurrent deployments, and to respond quickly to crises in areas in which we do not have forward-deployed troops.

Our goal, as we plan for the most demanding contingency, is to be able to deploy forces to Southwest Asia while also reinforcing NATO and key areas in Northeast Asia. Our forces must also be capable of sustaining deployed forces, and of intra- or intertheater redeployment in response to combat needs. Forces capable of meeting these objectives should be adequate for virtually any other contingency.

We plan to incorporate allied lift assets into our reinforcement efforts wherever possible. Our NATO and Northeast Asian allies have significant sealift capabilities to assist our deployments, and we are working to maximize their contribution. Although our allies also would contribute aircraft, their airlift capabilities are relatively small; we would have to provide the bulk of the airlift needed for a multitheater deployment. To reduce our airlift requirements to manageable proportions, we are prepositioning equipment and supplies in all three forward defense areas: Europe, Southwest Asia, and Northeast Asia.

A deployment to Southwest Asia would place particularly severe demands on our lift capabilities. The great distances involved, combined with the need to respond quickly, force us to rely heavily on airlift and prepositioning. Although the forces deployed by air would constitute only a small part of the total force required in the event of a major conflict or crisis in SWA, these forces would be essential for protecting the ports and other facilities needed for the subsequent deployment of our main forces by sea.

To strengthen the deterrent value of our conventional forces, this Administration is determined to provide the airlift and sealift capability needed to meet our most important reinforcement objectives. Procurement of new C-5s and KC-10s and an expanded Ready Reserve Force of ships is already under way. We are also working on the qualitative improvements that are especially important in SWA (e.g., development of the C-17 as well as new equipment for unloading ships in austere ports). Compared to the capability existing when we took office in 1981, these programs will:

- -- Increase intertheater airlift by 75% by 1990 and eventually more than double it;
- -- Increase the capacity of Ready Reserve shipping by 150%;
- -- Increase the number of Army divisions and Marine brigades for which equipment and supplies are prepositioned;
- -- Enhance en route support to our airlift forces;

-- Provide prepositioned equipment for the rapid deployment of all the Air Force aircraft planned for SWA; and

-- Give us an adequate capability to unload ships in the austere ports of SWA.

With these capabilities, we will be able to conduct major concurrent deployments to the most critical theaters. We must be able to meet our NATO commitment of providing six reinforcing divisions in ten days. At the same time, we must be able to establish a strong air defense posture in SWA quickly, and to deploy other forces in time to oppose any Soviet forces moving south.

e. Special Operations Forces

Buttressed by their massive buildup of strategic and conventional forces, the Soviets have undertaken -- directly and through surrogates -- a global campaign of destabilization, focused on the Third World, that seeks to achieve their objectives without direct confrontation with the United States. This is, and will continue to be for some time, the most prominent direct threat to U.S. national security interests.

U.S. Special Operations Forces (SOF) are being employed to counter these destabilization efforts. As a key element of our security assistance program, SOF work with the armed forces of 15 countries from all parts of the world, training them to deal effectively with instability and aggression. By assisting others to prepare their own defenses, we enhance the free world's ability to cope with Soviet expansionism, reduce the likelihood that U.S. forces will become involved in combat, and demonstrate our determination not to default on our commitments. At the same time, their foreign language capabilities and sensitivity to cultural differences allow SOF to work effectively with the peoples of other countries in a way that builds good will.

In time of crisis, these same forces represent a flexible, tailored alternative in situations where the use of conventional forces may not be appropriate or feasible. In a major conflict, they would be an indispensable adjunct to our conventional capabilities. SOF would be employed in a variety of roles including unconventional warfare, counterterrorist operations, security assistance, psychological operations, and direct action and intelligence missions.

Recognizing that the value of these forces transcends the limited investment in resources they represent, we have given high priority to revitalizing Special Operations Forces. We have added new Army Special Forces units and Navy SEAL teams. In addition, we are procuring aircraft, such as the MC-130 and HH-60D, outfitted to insert and remove SOF teams. Finally, we are upgrading our communications equipment and language training, which increases the ability of our SOF to work effectively in remote locations.

4. Meeting the Strategic Challenge

Ultimately, however, our ability to deter conventional conflict also depends upon a strong strategic deterrent. A potential aggressor must understand that, if conventional deterrence should fail, we possess a credible nuclear deterrent. Consequently, the need to modernize our strategic triad is no less essential, and no less immediate, than the need to modernize our conventional forces, and cannot be considered in isolation. In the minds of those we would deter, strategic nuclear deterrence must begin where conventional deterrence ends.

a. Growing Soviet Power

In the early 1960s, the United States had overwhelming strategic superiority. Our nuclear posture presented the Soviet Union with a compelling deterrent to launching a nuclear strike against the United States. Because the Soviets possessed a relatively small number of weapons that were ineffective against any U.S. strategic forces, they would have been unable to execute an attack successfully. If Soviet planners had targeted our missile silos and alert bomber bases with the systems they then possessed, they would have depleted their nuclear arsenal without having significantly reduced U.S. retaliatory forces. And since the Soviet Union could not limit the certain, massive retaliatory destruction of its own forces and assets, it would have made no sense at all for Soviet planners to target U.S. cities.

Although by 1970 the Soviet Union had attained rough strategic parity with the United States, during the following decade it continued a massive expansion of its strategic forces. The resulting major qualitative and quantitative improvements in both offensive and defensive systems significantly altered the strategic balance. Both sea- and land-based offensive intercontinental nuclear forces were modernized. The Soviets began the decade with 14 modern ballistic missile submarines; by 1980, this force had grown to 62 SSBNs. Today, even though their Y-class SSBNs are newer than all but three of our missile submarines, the Soviets have already begun replacing them with still newer SSBNs. In addition, the Soviets greatly expanded their land-based missile force by developing and deploying the SS-17, SS-18, and SS-19 ICBMs. Together, the SS-18s -- which are the world's largest ICBMs -- and the SS-19s carry between 4,000 and 5,000 highly accurate warheads designed specifically to attack our missile silos.

In conjunction with this offensive force buildup, the Soviets also began a major effort to increase their active and passive defenses in a clear and determined attempt to blunt the effects of a possible U.S. retaliation. This included major modernization of their already large air defense network -- which is today the most sophisticated in the world -- and development of a new ABM for the Moscow area. It also included hardening to an unprecedented degree (far above the strength of our Minuteman silos) their ICBM silos and launch facilities, and strengthening survivability of key command and control systems and facilities for national leaders.

A combination of Soviet defensive measures and the U.S. restraint described earlier in this report created a "sanctuary" for the Soviet ICBM force and other key assets protected by hardening. This, combined with the Soviet ability -- using only a portion of their SS-18s and SS-19s -- to attack our Minuteman force, significantly eased the problems of Soviet nuclear planners. They could now begin to envision a potential nuclear confrontation in which they would threaten to destroy a very large part of our force in a first strike, while retaining overwhelming nuclear force to deter any retaliation we could carry out. This ability to conduct a first strike also threatened to make less credible the deterrent linkage between our strategic nuclear force and our forward-deployed conventional and nuclear forces. In addition, the increasing Soviet emphasis on blunting the effects of U.S. retaliation held open the prospect of undercutting deterrence further, because the Soviet leaders could come to believe that their hardening programs would permit them to emerge from a major conflict with their forces, control, and war-supporting capabilities damaged but still functioning.

Thus, in a little over a decade, the Soviet Union had developed a significant counterforce capability while eroding our ability to retaliate. These developments have undercut the stability of the nuclear balance and undermined the retaliatory effectiveness that was at the heart of our policy of deterrence. If uncorrected, we could face the very real danger that the Soviet leadership could at some point come to believe that it could blackmail us by threatening to use nuclear forces to gain its military or political ends. Our strategic modernization program is designed to reverse these adverse trends, restore the strategic balance, and strengthen stability and deterrence.

b. Restoring the Nuclear Balance: The Strategic Modernization Program

To be certain that our strategic nuclear forces would be capable of deterring a Soviet first strike, and to preserve the deterrent linkage between our strategic nuclear and our forward-deployed conventional and nuclear forces, we found that we needed to modernize all three legs of our strategic triad:

- Our ICBMs lacked the requisite yield and accuracy to threaten retaliation against hardened Soviet assets, and were vulnerable themselves to a Soviet first strike.
- Our B-52s, last built in 1962, had become much less capable of penetrating the sophisticated Soviet air defense system. While some B-52s were in the process of being modified to carry cruise missiles, we recognized that an effective bomber force required a combination of penetrators and stand-off cruise-missile carriers.
- Our missile submarines -- almost all of which were built from 1962 to 1966 -- faced block obsolescence within a decade, and their missiles did not have the ability to hit hard targets.
- Our command, control, and communications systems lacked the survivability and endurance necessary to support our nuclear policy and our nuclear forces.

Because we had deferred U.S. modernization for a decade while the Soviets were expanding, we faced the difficult task of modernizing all elements of our strategic forces at once -- at a time when our conventional forces also required major improvements. Our strategic modernization program, which costs less than 15% of our defense budget, provides for:

- Ensuring that our C^3 systems are survivable and will remain capable of performing their basic functions throughout any potential sequence of Soviet attacks.
- Procuring 100 B-1B bombers to provide a penetrating bomber capability, while continuing to equip selected B-52s with cruise missiles. The program also continues development of an advanced technology bomber, which, in combination with the B-1B, will ensure that we are able to have both penetrating and stand-off capabilities well into the next century;

- Building Trident submarines at the rate of one per year in order to provide for a modern SSBN force when the Poseidon submarines reach the end of their service lives. We are also developing the Trident II submarine-launched ballistic missile and the Tomahawk sea-launched cruise missile. The Trident II, when deployed at the end of this decade, will give us both increased payload and the improved accuracy necessary to hit hard targets. The deployment of cruise missiles on selected attack submarines and surface ships adds to the nuclear reserve force, further diversifying our capabilities.
- Improving our strategic defenses by upgrading our surveillance systems and modernizing our interceptor forces.
- Providing the foundation for the modernization of our ICBM force by procuring and deploying 100 MX/Peacekeeper missiles and by developing a new, small, single-warhead ICBM.

As the Congress is aware, the issue of ICBM force modernization has been among the most difficult defense questions faced by this Administration and its predecessors. However, over the past twelve months, due in large part to the significant service performed by the President's Commission on Strategic Forces (the Scowcroft Commission), we have been able to build a bipartisan consensus on this issue. The four presidents and six secretaries of defense who faced the question of ICBM modernization over the last twelve years frequently embraced different solutions to this problem. All nevertheless shared the hope that a single, perfect solution to ICBM survivability and prompt hard-target kill capability would be found. The Scowcroft Commission recognized that no single weapon system or basing mode would be able to solve all of our problems and meet all of our requirements for both the near and the longer term. It is significant that the Scowcroft Commission fully endorsed the need to modernize all three legs of our strategic triad, as well as our C^3 systems. The Commission's recommendations, which the President accepted and the Congress approved, called for a two-phased solution that will not only help restore the overall strategic balance, but also solve the problems of retaliatory effectiveness and survivability.

Consistent with the recommendations of the Scowcroft Commission, we plan to deploy 100 Peacekeeper missiles in Minuteman silos to reestablish the hard-target capability necessary to maintain deterrence. However, this will not provide the degree of survivability we ultimately require. For the longer term, the plan calls for achieving survivability through development and deployment of a new, small, single-warhead ICBM, and continued research on missile-basing technologies. Deployment of the Peacekeeper will eliminate the Soviet monopoly of prompt hard-target capability. Deployment of a single-warhead missle will distribute the total number of warheads contained in the ICBM force over a larger number of smaller missiles, reducing the attack incentive of a potential aggressor. Continued research and development efforts on several basing modes offer a potential for increased survivability of our land-based forces.

c. Strategic Defense

While this Administration is taking these steps to strengthen the offensive arm of deterrence and to obtain significant, verifiable arms reductions, in a speech to the American people last March President

Reagan also offered the hope of a world made even safer from the threat of ballistic missiles. Recent advances in technology may offer us, for the first time in history, the opportunity to strengthen deterrence by developing an effective defense against ballistic missiles. President Reagan is determined that we explore fully that opportunity.

To guide the efforts of those working toward that important goal, the President last year directed an intensive analysis to describe a technically feasible research program for an effective defense against ballistic missiles, and to assess the implications of such a program for the prevention of nuclear war, deterrence of aggression, and the prospects for arms control. The study concluded that advanced defensive technologies could offer the potential to enhance deterrence and to help prevent nuclear war by reducing significantly the military utility of Soviet preemptive attacks and by undermining an aggressor's confidence in the probability of a successful attack against both the United States and its allies. It also identified a research program that will clarify future technical options for a defensive system.

Although the study acknowledged that there are uncertainties that will not be resolved until more is known about the technical characteristics of defensive systems and the possible responses of the Soviet Union to U.S. initiatives, it concluded that a research program should be started now. Of key importance in this regard is the fact that the Soviet Union has pursued advanced ballistic missile defense technologies for a number of years and is the only country maintaining an operational ballistic missile defense system. Unilateral Soviet deployment of an advanced system capable of countering Western ballistic missiles -- added to their already impressive air and passive defense capabilities -- would weaken deterrence and threaten the security of the United States and its allies. Thus, U.S. research efforts will provide a necessary and vital hedge against the possibility of such a one-sided Soviet deployment. In addition, our effort could provide a potentially powerful tool to moderate the development of future offensive systems and to make the world more stable and secure.

The Strategic Defense Initiative must complement other elements of U.S. national security capabilities and policies. Consideration of a defensive system against a range of nuclear threats by no means diminishes the need to strengthen U.S. and allied conventional military capabilities. Nor does it change our responsibility to help deter other types of attack on our allies. As President Reagan said: ". . . their safety and ours are one. And no change in technology can or will alter that reality." In the search for effective strategic defensive systems, it must be a primary requirement that they provide security to our allies as well as the United States and that they do not reduce our capabilities to maintain our commitments around the world.

Our studies have also considered the relationship between ballistic missile defense and U.S. arms control policy. Our proposed research program will be entirely consistent with existing U.S. treaty obligations. For the longer term, offensive force reductions and defensive technologies can be mutually reinforcing. Effective defenses that reduce the utility of ballistic missiles and other offensive forces have the potential for increasing the likelihood of negotiated reductions of those offensive forces. In turn, effective limitations on offensive systems could assist defensive systems in reaching their full deterrent potential. Ballistic missile reductions of the magnitude proposed by the United States in the START and INF talks would be very effective in this regard.

In summary, an effective defense against ballistic missiles can have far-reaching implications for enhanced deterrence, greater stability, and improved opportunities for arms control. Our efforts do not seek to replace proven policies for maintaining peace, but to strengthen their effectiveness in the face of a growing Soviet threat. The essential objective of the U.S. strategic defense initiative is to diminish the risk of nuclear destruction and to provide for a more flexible, less menacing way of preventing nuclear war in the decades to come.

5. Management Reforms

While our defense program seeks the minimum capability required to deter war and to preserve peace with freedom, it is still an ambitious undertaking. Because the challenges we face are many, and the capabilities we must build are significant, we must ensure that we invest every defense dollar wisely. With a budget of $305 billion, which will involve over 15 million contractual transactions in the coming year, we face daunting management challenges.

We have prepared ourselves for those challenges. One of the first steps we took after arriving at the Pentagon was to determine how we could manage our defense programs more efficiently. Within a few months, we instituted a sweeping acquisition improvement program that comprised 32 major initiatives to bring good business sense to defense procurement.

To correct long-standing inefficiencies, we have taken measures to budget more realistically for future acquisitions, to encourage more competition, to produce equipment at more efficient rates, and to infuse greater stability into defense contracting. In each case, we have not only had to change internal procedures in the Defense Department, but have also had to work with industry and the Congress. For, while our reforms help industry take advantage of more efficient and economic production, we are also demanding more of defense contractors than we did in the past. And, while our reforms give us more defense for the dollar, they also require the Congress to consider business efficiency ahead of political expediency, and to approve up-front investments for long-term savings.

Well-entrenched problems and inefficiencies are not always easily uncovered or readily corrected. The Defense Department's auditors and investigators have been working with our employees to identify such problems, and with our managers to ensure that reforms are implemented. One area that we have investigated aggressively is spare parts procurement. Unfortunately, our findings have become the source of press stories that criticize the Defense Department without mentioning that the Defense Department itself uncovered the problems or that we have instituted a very successful ten-point program to resolve our problems with spare parts. Our reforms have only begun. Inefficiencies that have existed for decades cannot be eliminated at once. But the Defense Department has taken the lead in President Reagan's campaign to improve management throughout the government.

We have good reason to be optimistic, because our reforms are working. While they will never make inexpensive the cost of rearming America, they will assure that our defense budget is wisely invested. And there can be no investment more crucial to the future of our nation.

Part II
Defense Resources

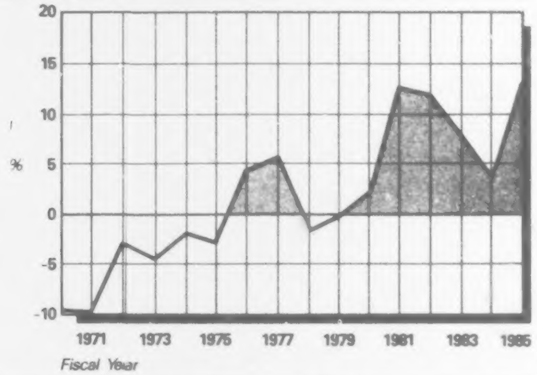
A. THE DEFENSE BUDGET

1. Introduction

The Defense budget is developed in light of objectives we have formulated, commitments we have made, and threats that we face. These factors do not ebb and flow with the business cycle. While such spending does have economic effects, these effects -- stimulative or otherwise -- should not dominate any debate about the level of our national commitment. Defense spending should be undertaken only for the purposes of national security.

There has never been any question that President Reagan's plan to restore America's defenses would require the commitment of substantial resources. As a first step, we prepared an $8.1 billion supplement to the FY 1981 budget and amended the proposed FY 1982 budget by $18.1 billion so as to provide some necessary immediate improvements for our existing forces. At the same time, we increased planned funding levels for FY 1983-86 in order to maintain and enhance the readiness and sustainability of our operating forces and to begin a program of force modernization that would ensure our future security against an increasing threat. The program we proposed contained a sustained real growth in defense expenditures each year through FY 1986, a marked difference from the no-growth pattern that prevailed throughout most of the 1970s (Chart II.A.1). The cumulative funding requirements for this ambitious five-year program amounted to $1,459 billion. With this came the obligation to spend these funds wisely. Therefore, we began immediately to improve the budget and acquisition process within the Department of Defense to ensure these resources would be allocated efficiently and economically.

Chart II.A.1
Real Growth in DoD Budget Authority



Since FY 1981, we have made considerable progress toward revitalizing our military forces. Providing needed funds for only a few years cannot, however, eliminate the problems created by a decade of neglect. Reductions made to our FY 1984 budget request will delay the planned defense buildup. The momentum created by the FY 1981-83 budgets must be regained.

2. Components of the FY 1985 Budget

a. Budget by Category

The level of resources we are requesting for FY 1985 is essential to the long-term success of our revitalization program. A lower level would not only raise the total cost of the program due to delays, stretch-outs, and terminations, but also would upset the balance we have built into the defense program. The President's defense budget, shown in Table II.A.1, proposes budget authority of $305.0 billion for FY 1985. The tables in the appendices provide budget data by appropriation title and by component in current and constant FY 1985 dollars.

Table II.A.1

Department of Defense - Military Functions
($ Billions)

Current-Year Dollars	FY 1983	FY 1984	FY 1985
Total Obligational Authority (TOA)a/	238.7	259.1	305.7
Budget Authority (BA)b/	239.5	258.2	305.0
Outlaysc/	205.0	231.0	264.4
Constant FY 1985 Dollars			
Total Obligational Authority (TOA)a/	259.6	270.8	305.7
Budget Authority (BA)b/	260.4	269.9	305.0
Outlaysc/	222.2	241.8	264.4

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a/ Total Obligational Authority (TOA) represents the value of the direct defense program for each fiscal year, regardless of the method of financing.

b/ Budget Authority (BA) permits the obligation of funds for immediate and future dispersement and is associated with the year the authority takes effect. Generally, the difference between TOA and BA stems from the application of receipts that offset total budget authority.

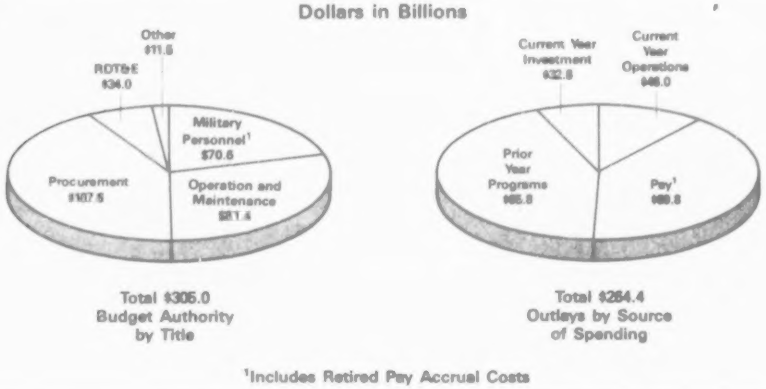
c/ Outlays represent actual expenditures. Less than 65% of FY 1985 outlays will result from FY 1985 budget authority; the remainder will come from budget authority provided in earlier years.

The FY 1985 request represents an increase of $46.8 billion over the level approved for FY 1984. Of that amount, nearly $11.7 billion, or 24% is needed to offset the effects of inflation. Consistent with our long-term goals, the remaining funds will be used to improve combat readiness and sustainability, enhance airlift and sealift capabilities, modernize the strategic forces, and modernize and expand conventional forces.

The distribution of FY 1985 budget authority by major appropriation title and FY 1985 outlays by source of spending is shown in Chart II.A.2. Operating costs represent about 52% of total DoD budget authority. This category includes pay; equipment maintenance; fuel and utilities; medical expenses; training; and spare parts. The remainder of the budget contains funds for research and development, procurement of weapon systems, and military construction and family housing.

Chart II.A.2

FY 1985 DoD Budget



In FY 1985, as in prior years, outlays will be spent primarily on current-year operations and pay, and on prior-year investments. Expenditures for current-year operations are generally used for maintenance and support activities. Outlays for prior-year programs are largely a function of procurement and R&D investments begun in previous years. Only 12.4% of FY 1985 outlays will be spent on new investment programs.

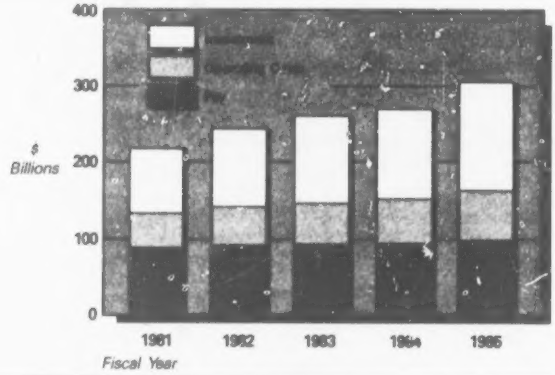
Real growth in the FY 1985 budget continues the positive trend begun in FY 1981 in all areas of the defense program (Chart II.A.3).

b. Personnel

The FY 1985 budget includes $98.9 billion to pay our military and civilian personnel. This represents an increase of 2.9% in real terms over the FY 1984 level, which is necessary to strengthen the manning of our strategic and conventional forces.

This category also includes pay for retired military personnel. For several years, the Department has proposed legislative changes to the method by which the cost of military retirement pay is budgeted. The FY 1984 DoD Authorization Act requires the adoption of an accrual accounting system for military retirement pay beginning in FY 1985. Under this system, the budget will reflect the future retirement benefits accrued by military personnel on active or reserve duty. This method will have no effect on total federal outlays, but will make the defense budget a better measure of the cost of military pay.

Chart II.A.3
DoD Budget Shares
(Budget Authority in FY 1985 Dollars)



c. Operating Costs

In FY 1985, we will continue the steady improvement in the operation and support of our forces, which, in turn, enhances readiness and sustainability. Further improvements in materiel readiness are expected as a result of the increased procurement of spare and repair parts, equipment maintenance and modification, and other logistic support. In addition, the budget includes resources necessary to support weapon systems introduced as part of the modernization program, and to provide additional and more realistic training for our personnel.

d. Investment

After increasing by 38.1% from FY 1981 to FY 1983, investment funding (procurement, RDT&E, and military construction) will rise by only 4.7%, in real terms, in FY 1984. It is essential that we regain the momentum we achieved in the modernization program by making essential improvements to the conventional and strategic forces. Therefore, the FY 1985 budget proposes a 19.5% increase in investment funding. These funds will permit us to procure the systems described in Part III of this report.

Resources are again provided for key acquisition initiatives. The FY 1985 budget requests funds to procure 12 major weapon systems on a multiyear basis. This approach allows us to buy items at more economical rates (thereby lowering unit costs) and to use production resources more efficiently. The budget also includes funding for major productivity-improvement projects to modernize government-owned tooling, equipment, and facilities. Increased amounts are likewise budgeted for manufacturing-technology programs. While these initiatives require large near-term investments, they produce significant savings over the course of a program.

3. Price-Level Assumptions

Estimates of the future impact of inflation are prepared on the basis of projected inflation rates for the Gross National Product (GNP) deflator furnished by the Office of Management and Budget. The GNP deflator is used for all purchases except major weapon systems and fuel. Beginning with the FY 1983 budget, we have used special weapon system commodity inflation estimates based on analysis of historical trends of defense inflation published by the Department of Commerce's Bureau of Economic Analysis. Special consideration is also given to projected fuel prices, due to the large amount of fuel we must buy and the potential volatility of fuel prices. These improved forecasting techniques, coupled with our acquisition management initiatives, have been used to program realistically for inflation and to budget to most likely cost. Military, civilian, and retired pay increases are determined separately.

The President's economic program has resulted in a significantly lower rate of inflation. We adjusted the FY 1984 budget request to reflect the declining trend in the rate of inflation. The FY 1985-89 budgets also assume these favorable trends will continue. However, the unique nature of price changes for the defense commodities suggests that the rate of inflation for the general economy may not be equal to that for defense purchases. Therefore, reductions in the defense budget due to lower inflation must be viewed very cautiously so as to prevent possible underfunding of programs leading to later cost overruns.

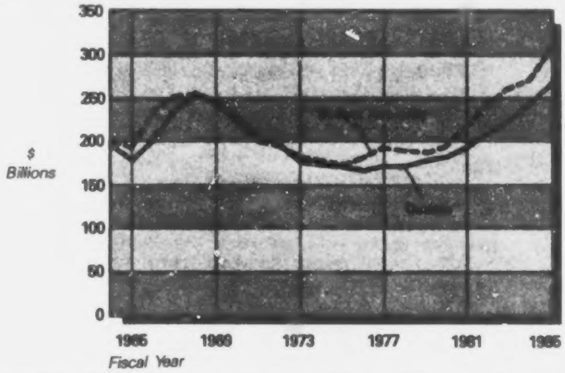
4. Budget Trends

The FY 1985 budget continues the carefully planned growth in defense resources begun in FY 1981. This pattern is in stark contrast to the no-growth trend during much of the 1970s, when defense spending did not keep pace with the level of inflation (Chart II.A.4).

However, the growth in defense spending achieved since FY 1981 and planned for the next five years has led some to question whether we can afford this buildup. A historical review of the defense share of GNP and total federal spending shows that the current and projected level of resources committed to defense is clearly affordable.

Even though total federal spending has increased substantially over the past two decades, there has been a substantial change in its composition, with defense expenditures declining as a percentage of both federal expenditures and GNP. The defense share of federal outlays has dropped from an average of 48% in the 1950s to about 30%

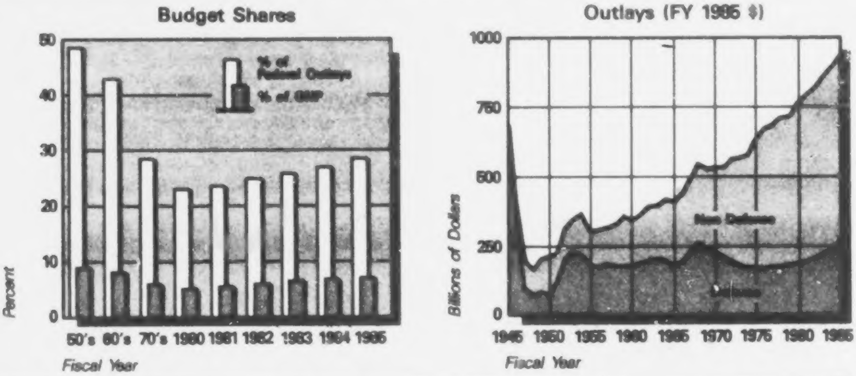
Chart II.A.4
DoD Budget Trends
(in FY 1985 Dollars



today (left figure, Chart II.A.5). Even with the continuing buildup, defense spending will account for only one-third of the federal budget in FY 1989. Nondefense spending, on the other hand, constituted about 50% of total federal outlays in the 1950s, but now represents more than 70% of the budget. In further contrast, nondefense federal expenditures have increased dramatically in real terms since FY 1970, while defense spending has declined, and is only now approaching its FY 1968 level (right figure, Chart II.A.5).

Based on current estimates of defense outlays and economic growth, the defense share of the nation's output of goods and services (GNP) will average only slightly more than 7% over the next five years (left figure, Chart II.A.5). This is well below the peacetime levels of the 1950s and early 1960s. Should economic growth exceed current forecasts, the defense share of GNP would be even smaller. (Defense shares of the budget and economic aggregates are shown in the appendices.)

Chart II.A.5
DoD Budget and
Total Federal Outlays



5. Economic Effects of Defense Spending

There has been considerable discussion about whether the U.S. economy can support the Administration's planned defense buildup without creating inflationary pressures and supply shortages. We recognize that the defense budget does have an impact on the economy, just as the economy has an impact on the formulation and execution of the defense budget. After careful analysis of these effects, we believe that increased defense spending is not detrimental to economic recovery and, in fact, has many positive aspects.

a. Defense Spending and Industrial Capacity

Last year, the Department of Commerce, with the cooperation of the Department of Defense, completed an extensive study of the adequacy of existing and planned industrial capacity to produce the goods and services required by an expanded defense effort. This in-depth analysis concluded that, in most cases, existing domestic capacity is adequate to supply projected defense and nondefense needs. The Defense Department has studied several defense-intensive industries in greater detail. We reviewed capacity in some important metals and metalworking industries and examined several tiers of the production process in the aircraft industry. The data from these studies, as well as those gathered from plant-by-plant and product-by-product comparisons, confirm the conclusions of the Commerce Department study. A group of leading private forecasters also agree that current U.S. production capacity is generally adequate to meet the increased demands generated by accelerated defense spending.

We are aware that there may be problems in a few industries. In the areas where vigorous demand may put pressures on plant capacity, the Department of Defense has taken a number of steps to eliminate potential bottlenecks or other problems. For example, we are now evaluating the production requirements generated by our future procurement plans on a recurring basis. For the first time, industry analysts are being provided detailed estimates of what defense requirements will be and when they will occur. As a result, any expansion of industrial capacity that is required can be foreseen and planned for in the private sector so that industry can better prepare itself to compete for defense business and plan the necessary capital investment. Therefore, with national support, advance planning, selected enhancements to the nation's industrial capacity, increased manpower and training, and sufficient raw materials, the current defense buildup is attainable.

b. Defense Spending and Fiscal Policy

The prospect of continuing high federal deficits has increased pressure to lower the level of resources available to meet our defense commitments. There seems to be a belief in some quarters that large defense-spending reductions must be made as the primary means of lowering future federal deficits. However, the defense budget is not and should not be used as a fiscal shock absorber -- a task for which it is not designed or suited.

The effectiveness of using defense spending as a tool of fiscal policy is limited by the fact that expenditures for major weapon systems are typically spread over many years. Consequently, large cuts in procurement funding produce only relatively small reductions in annual outlays. In addition, cuts in defense spending do not translate one-for-one into reductions in the federal deficit. In fact, only a portion of each dollar cut from the defense budget shows up as a reduction in the deficit. The effect on the deficit is small (much smaller, for example, than the effect of reducing transfer payments) because of the contribution of defense spending to GNP and employment. Because of that linkage, favorable effects on the deficit of cuts in defense spending would be partially offset by the reduced tax revenues and increased unemployment insurance payments they would generate.

Cuts in major programs also tend to increase defense costs over the long run. Decisions on what type of systems to produce, and on the number of each to acquire, reflect assessments of the threats we face. When pressures are brought on the defense budget in response to short-run economic events, we are usually forced to choose between postponing the start of programs or stretching out existing ones. In either case, reductions in outlays would come at the expense of increased spending in future years. This is because entire programs would be deferred or, if stretched out, fewer units would be purchased each year, thereby raising unit costs and, ultimately, total spending levels.

Issues related to our national economic well-being are too important to the future viability of our way of life to be discussed in terms of only one issue -- defense spending. Defense budgets are planned in terms of the threats we face, and those threats do not change with changes in the business cycle. Defense spending, therefore, should not be adjusted in response to short run economic developments. Doing so is not only ineffective fiscal policy, but also increases defense costs and impairs our national security.

6. Long-Range Forecasts

We are on the way to improving our defense capabilities, as we have promised the American people. The President's FY 1985-89 defense program, shown in Table II.A.2, sustains our effort to fulfill that promise. The program, which totals $1,891 billion over the five-year period, is based on the price assumptions discussed earlier.

The defense program represents an investment in the future. It is designed to meet both short- and long-term requirements as efficiently and effectively as possible. We recognize that long-term constraints on the nation's productive resources must be considered in the allocation of these resources. In the final analysis, however, the future security of our values and institutions must determine the affordability of our defense programs.

Table II.A.2

FY 1985 Department of Defense Budget
Long Range Forecasts
($ in Billions)

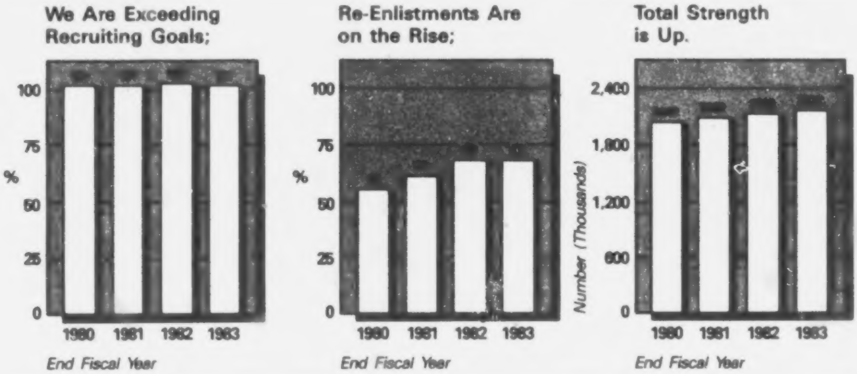
	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989
Budget Authority					
Military Retired Pay	17.6	19.4	20.9	22.5	24.0
Other Military Functions	287.4	330.2	358.3	389.0	422.1
Total, Current Dollars	305.0	349.6	379.2	411.5	446.1
Total, Constant (FY 1985) Dollars	305.0	333.0	344.7	357.9	371.7
Per cent Change	13.0	9.2	3.5	3.8	3.9
Outlays					
Military Retired Pay	17.4	19.3	20.9	22.5	23.9
Other Military Functions	247.0	282.5	318.3	347.3	374.9
Total, Current Dollars	264.4	301.8	339.2	369.8	398.8
Total, Constant (FY 1985) Dollars	264.4	286.7	306.8	319.5	330.1
Per cent Change	9.3	8.4	7.0	4.1	3.3
Composite Pay/Price Assumptions for Outlays	100.0	105.3	110.6	115.8	120.9

B. MANPOWER

1. Introduction

Well-trained and motivated people are our most valuable defense resource. Upon assuming office, this Administration learned that almost every aspect of our manpower program was in trouble. There was genuine concern that the all-volunteer concept might not succeed. In the past three years, all aspects of our manpower program have improved substantially. We are committed to protecting and enhancing our investment in people and to ensuring that this investment pays dividends in improved readiness.

Chart II.B.1
Improvements in Military Manpower



We Are Exceeding Recruiting Goals;

Re-Enlistments Are on the Rise;

Total Strength is Up.

This chapter discusses our military and civilian manpower programs. It includes material on the important areas of equal opportunity and health and medical resources. Detailed discussions of our manpower program are provided in the Defense Manpower Requirements Report and the Military Manpower Training Report.

2. The Manpower Program

a. Active Military Manpower

When this Administration came into office, our forces were undermanned. We could not attract sufficient numbers of recruits to fill the ranks. Recruit quality, as measured by test scores and educational level, had reached an all-time low. Morale had plummeted, and experienced career personnel were leaving in large numbers. The cumulative effect of years of inadequate compensation and neglect of our men and women in uniform had taken its toll.

Today, there is overwhelming evidence that our efforts to revitalize the armed forces have met with success. The active forces are meeting their manning targets; all of the Services are achieving their recruiting objectives. Test scores and educational levels of new recruits now exceed those of the civilian youth population. Excessive losses from the career force have been stopped; reenlistments are up significantly; and the career force is growing in size, experience, and quality. On the basis of these positive results, we remain committed to a volunteer force in peacetime for the foreseeable future.

The following sections examine four aggregate indicators of personnel readiness: end strength, experience, skills, and stability.

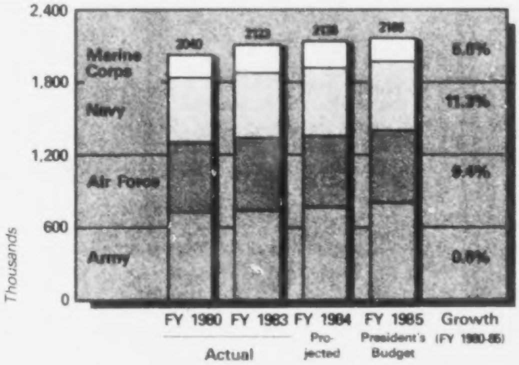
(1) End Strength

Total strength is a fundamental determinant of unit personnel readiness. From FY 1980 to FY 1983, active-duty end strength increased by 83,700 personnel, or just over 4.1%. The Air Force and the Navy experienced the greatest growth, both in absolute and relative terms. Navy growth has been a result of both more fully manning existing units and adding new units to the force structure. Air Force growth has been in support of new and expanded missions. The Army and the Marines have generally held their force structure constant, while increasing unit manning.

(a) Active Military Manpower

We plan to increase the number of active military personnel at the end of FY 1985 by 42,450 (about 2%) over end-FY 1983 levels, as shown in Chart II.B.2.

Chart II.B.2
Active Military Manpower
(End Strengths)



The Congress denied all but 8,500 of the 37,300 growth in active-duty end strength requested for FY 1984. This loss comes at a time when the force structure is expanding and the threat is increasing. We cannot consider manpower requirements and levels independent of programs. If end-strength levels are constrained while funding for new programs is approved, the undermanning that results will ultimately degrade overall readiness.

(b) Recruiting

FY 1983 was an excellent recruiting year in both quantity and quality. As in FY 1981 and FY 1982, all four Services met or exceeded their recruiting goals. Table II.B.1 shows actual enlisted accessions for FY 1983 and planned recruiting levels through FY 1985.

Table II.B.1

Enlisted Active-Duty Accessions
(Numbers in Thousands)

	Actual		Planned	
	FY 1983 Number	Percentage of Objective	FY 1984 Number	FY 1985 Number
Army	145.3	101	147.5	139.6
Navy	82.8	100	89.1	96.6
Marine Corps	39.0	103	40.0	41.6
Air Force	63.6	100	61.0	69.8
DoD Total	330.7	101	337.6	347.6

In assessing the quality of accessions, we use two shorthand indicators: high-school diploma completion and Armed Forces Qualification Test (AFQT) scores. Table II.B.2 shows the significant increase in high-school graduate recruiting achieved between FY 1980 and FY 1983 and the levels planned for FY 1984 and FY 1985.

Table II.B.2

High School Diploma Graduates
Among Non-Prior-Service (NPS) Active Duty Accessions a/
(Numbers in Thousands)

	Actual				Planned			
	FY 1980		FY 1983		FY 1984		FY 1985	
	Number	%	Number	%	Number	%	Number	%
Army	85.8	54	116.2	88	120.5	88	122.0	90
Navy	65.8	75	68.3	91	66.1	82	70.9	82
Marine Corps	32.5	78	33.8	92	34.9	90	36.4	90
Air Force	59.3	83	59.4	98	57.6	96	59.8	92
DoD Total	243.5	68	277.7	91	279.1	88	289.1	88

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a/ Numbers may not add to totals due to rounding.

Table II.B.3 shows that in FY 1983 the Services achieved quality levels mandated by the Congress in the annual Authorization Acts since FY 1981. While we are confident that recruiting efforts will continue to succeed, the more stringent limitations on AFQT Category IV (below average) accessions restrict our flexibility and could present a problem in future years, particularly for the Army.

Table II.B.3

Quality Indicators
(FY 1983 Non Prior Service (NPS) Active Duty Accessions)

	Category IV Recruits as Percentage of NPS a/	High School Diploma Graduates as Percentage of Male NPS
Army	12	86
Navy	8	90
Marine Corps	6	91
Air Force	2	98
DoD Total	8	90

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a/ Male and Female

Congressional recruiting guidance, further improvements in the economy, and a continuing decline in the size of the military-age population will make recruiting in the coming years an extremely challenging task. The Services must have appropriate recruiting resources and incentives if they are to continue attracting high-quality men and women. We will continue to make every effort to enhance both the attractiveness of military service and its competitiveness in the youth labor market.

(2) Experience

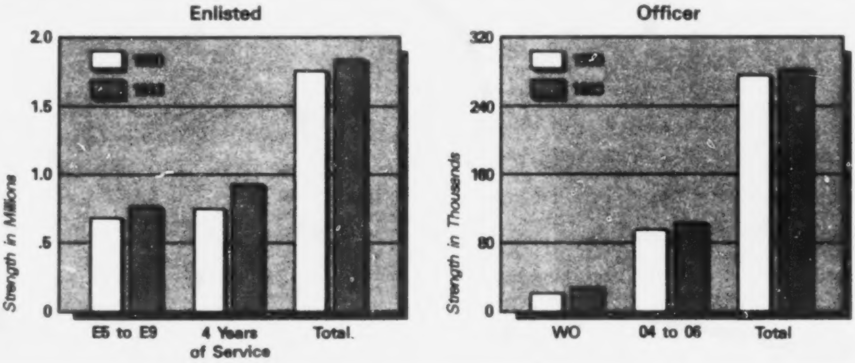
Experience is another key element of personnel readiness. As the following discussion points out, we have made significant improvements in the average experience levels of both the officer and the enlisted force, as measured by years of service and grade distribution.

(a) Officer

Since FY 1980, the total officer population has increased by nearly 22,600, or over 8.1%, with 6,000 of this net increase (27%) among officers with between four and nine years of service. This indicates that more junior officers are choosing to stay in the service at their initial career decision point (generally the fourth or fifth year of service). Today, our junior officers generally have more years of service in grade, which results in better and more experienced leadership at the unit level.

Retention of officers continued to improve through FY 1983. As the economy further improves, there may be some reduction in retention, although it should remain at an acceptable level. Good retention has continued to improve the manning in some critical skill areas. However, experience shortages will remain for some time as a result of low retention in previous years.

Chart II.B.3
Experience and Leadership



(b) Enlisted

Between FY 1978 and FY 1983, the proportion of career personnel in the enlisted force rose by 13%. Two major factors have contributed to this gain. First, we regained some of the experience lost in the middle and late 1970s by enlisting more personnel who had served previously in the military, especially in the Navy. In FY 1983, some 25,600 people with prior military service chose to enlist; this exceeded our goal by nearly 6%. Second, reenlistment rates are improving. Defined here as immediate continuous reenlistments as a percentage of eligible personnel, the reenlistment rate increased from 61% (207,000 reenlistments) in FY 1981 to 68% (227,000 reenlistments) in FY 1983.

The Services continuously review their personnel needs in the context of force modernization. It is important to continue the growth in our career force over the coming years, given the higher levels of skill and experience required to operate and maintain today's technologically advanced equipment. Besides meeting our equipment-related requirements, continued growth will support the enlisted leadership needs of the Services and permit relatively stable personnel management practices, which enhance retention over the long term.

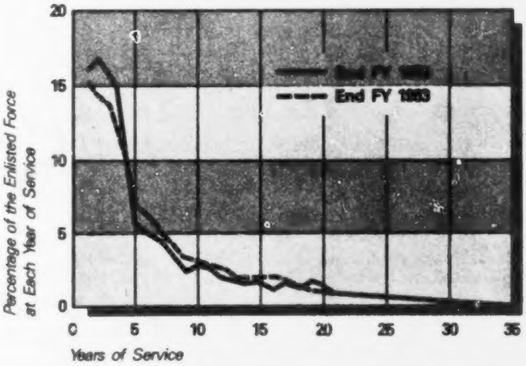
As the experience of the force increases, costs will increase. However, recent increases in personnel-related costs do not reflect "grade creep," but rather the evolutionary pay increases that have been driven by inflation, our commitment to competitive and equitable compensation, and, to a lesser degree, our conscious effort to raise and maintain the experience level of the force. A greater appreciation for factors that have influenced personnel costs can be gained by comparing some characteristics of the FY 1978 and FY 1983 forces.

The percentage of the career force in the five most senior pay grades has decreased steadily since FY 1978. This has contributed to our shortage of enlisted leadership. Improved retention has reversed excessive career force losses and has brought about the recent career force growth, which supports the programmed force structure.

Chart II.B.4 depicts the distribution of the force by years of service and shows that the FY 1978 force was less experienced (a higher percentage had four or fewer years of service) than the FY 1983 force, which had a higher proportion of personnel with between 5 and 15 years' service. Overall, greater experience has been obtained without an appreciable increase in the average pay grade.

Chart II.B.4

Experience of the Enlisted Force



Enlisted retention is now at an acceptable level in most segments of the force, although chronic shortages persist in some skills -- particularly in those career fields that are highly marketable in the private sector and those that involve arduous duties. A large portion of the shortages remains in the middle grades and will be alleviated only when people now in the lower grades develop the skill and experience needed to move upward.

Without a doubt, the Enlistment and Selective Reenlistment Bonuses remain the most cost-effective accession and retention incentives. However, we also make maximum use of nonmonetary management initiatives to improve retention. These initiatives cover the full range of the personnel life cycle, including reclassification and retraining, promotion, reenlistment, and separation. Quality of life programs and job enrichment efforts are aimed at making military jobs more rewarding and challenging. However, a sustained economic recovery, lower unemployment rates, further erosion of relative military pay, and expanding accession requirements collectively call for continued congressional support to avoid a manning shortfall in FY 1984 and FY 1985.

(3) Skills

Availability of personnel with needed skills directly affects personnel readiness at the unit level. There have been some recent gains in skill areas where shortages had contributed to degraded readiness in the past. Table II.B.4 highlights these improvements in manning some of our most critical skills.

Table II.B.4

Personnel in Selected Critical Skills
(To nearest 100)

	FY 1980	FY 1983 a/	Growth
Officer			
Nuclear officers, Navy	3,000	3,600	20.0%
Pilots			
Navy/Marine Corps	13,800	15,300	10.8%
Air Force	23,900	24,700	3.3%
Engineers	13,400	14,500	8.2%
Enlisted			
Combat Arms			
Army	156,200	160,900	3.0%
Marine Corps	39,700	42,000	5.8%
Electronics Equipment Repairmen	154,600	172,200	11.4%
Electrical/Mechanical Equipment Repairmen	348,500	373,300	7.1%
Nuclear power, Navy	20,600	23,500	14.1%

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a/ Data are as of 30 September 1983

Although we continue to experience shortages in some critical officer skills, our manning position is improving:

-- A 20% shortage of nuclear-trained officers, with a 26% shortage in the grades of lieutenant commander to captain, is our most serious problem. The shortfall is being reduced by increasing retention, but correcting the higher-grade shortage will require extremely high retention levels.

-- Although requirements for pilots continue to grow, we have reduced the pilot shortage from about 5,000 in FY 1981 to about 1,200 in FY 1983. This favorable trend should continue.

-- The overall shortage of engineers should be nearly eliminated by FY 1984, but we will continue to have difficulty obtaining and retaining enough personnel in certain specialties, like electronic engineering.

In addition to improved manning of critical enlisted skills, we are maintaining high-quality personnel in these skills. Four factors are responsible for the growth and quality we have achieved: the positive accession and retention trends previously cited; the effect of enlistment bonuses on the quality of recruits entering training; more effective training in areas of greatest need; and lower rates of attrition during the first 12 months of service (from 15.0% in FY 1981 to 13.5% in FY 1983). Our lower 12-month attrition rate has been achieved in conjunction with a slightly higher rate of three-month attrition losses (9.7% in FY 1983 vs 8.8% in FY 1981), which reflects early identification and separation of people who fail to meet performance standards.

Training imparts skills, and one of our foremost objectives is to continue the progress the Services have made toward more effective training for individuals and military units.

Individual Training. The FY 1985 budget request continues incremental improvements to individual training begun in prior years. For example, the Air Force is continuing a program of moderate increases in the length of training courses for maintenance personnel. The Navy is requesting selected increases in training resources to bring this kind of training to the required level of effectiveness.

Unit Training. We continue to place a high priority on developing team proficiency and cohesion of operational units. In pursuing this objective, we emphasize realistic training -- that is, under conditions as close to combat as technology, safety rules, space availability, and the prudent use of resources will allow. The combination of technology, innovative training concepts, and adequate space that characterizes the Army's National Training Center at Fort Irwin, California, is a prime example of this approach. We also are emphasizing the use of training devices and facilities required for realistic training with new weapon systems as they become operational -- for example, team firing ranges for Abrams (M-1) tanks and Bradley Fighting Vehicles.

(4) Stability

There are a number of ways in which increased stability resulting from lower personnel turnover contributes to improved readiness:

- Individuals stay together longer in units, improving their teamwork and mutual confidence.
- Team proficiency is increased, tactical competency is improved, the lessons learned in team training last longer, and operational efficiency and safety are enhanced.
- Costs are avoided, since fewer Permanent Change of Station (PCS) moves are required to replace losses. In FY 1983, there were 47,800 fewer individual moves than in the previous year, which allowed a cost avoidance of about $103 million.

During FY 1980-83, the trend has clearly been toward greater stability. Measured annually, the stability of the enlisted military population has increased by 3.7%, with the following increases reflected according to Service:

Army	1.8%
Navy	4.6%
Marine Corps	2.7%
Air Force	5.5%

Among the factors contributing to greater stability are more completed enlistments, more reenlistments, and fewer accessions overall; management discipline; more personnel of higher quality, who are more likely to complete an enlistment and/or to reenlist; and greater job satisfaction among our service members.

(5) Other Related Factors

Other factors related to personnel readiness and the overall management of the force are quality of life, compensation, education incentives, and general/flag officer management.

(a) Quality of Life

Quality of life encompasses many individual programs that recognize the importance of the people who make up the armed forces and acknowledge their contributions to the defense effort. We have built on efforts begun early in this Administration to improve existing programs and have also developed new programs to help compensate for the demanding aspects of military life.

Chart II.B.5
Quality of Life Programs

- **Medical Care**
- **Child Care**
- **Legal Assistance**
- **Religious Programs**
- **Assignment Policies**
- **Housing**
- **Family Services**
- **Education Programs**
- **Retail Store Activities**
- **Postal Services**
- **Financial Counseling**
- **Recreation Services**

We have given priority to improving the quality of life in overseas and remote areas, both for single Service personnel, and, where accompanied tours are authorized, for families. Twelve schools for dependent children in overseas areas will be built or remodeled during FY 1984. Twenty-one new child care facilities will be constructed, as will twenty-six physical fitness centers, fifteen family service centers, eight chapels, and six multipurpose recreational facilities. We plan to increase the number of family service centers on defense installations to 266 within the next year. To meet the growing demand for child care, the Department operates nearly 550 child care facilities on some 400 military installations worldwide. Family day care programs are also being expanded.

Significant progress has also been made in the family advocacy area, where new initiatives have resulted in increased awareness, enhanced delivery of assistance to families in need, and improved measures aimed at the prevention of child and spouse abuse and neglect.

We recognize that service members are making career decisions based on their families' assessment of their quality of life. It appears that a significant correlation exists between quality of life programs, spouse satisfaction, and recruitment and retention of qualified people on the one hand, and the discipline, morale, and readiness of our forces on the other. DoD's efforts in the last three years, in concert with those of the Congress, clearly demonstrate our commitment to improving the quality of service life. Our ultimate goal must be to treat each member of the armed forces and his or her family with compassion, concern, and consideration.

(b) Compensation

The military compensation system plays a vital role in our manpower program. It is one of the major determinants of our ability to attract and retain the military manpower necessary to meet our national security objectives. The significant compensation improvements that have been made since FY 1981 have enabled us to compete with the civilian sector for required manpower.

The compensation program proposed for FY 1985 is consistent with our fundamental goal of providing military personnel a fair and equitable compensation system, one that recognizes the hardships and sacrifices intrinsic to military service and, at the same time, that enables us to meet our manpower objectives. We will be seeking a military pay raise, improvement in reimbursement for expenses associated with permanent change of station moves, and improvements in a number of special and incentive pays. Our approach to these special and incentive pays reflects recommendations of the Fifth Quadrennial Review of Military Compensation (QRMC).

One feature of the compensation program related to moving expenses is the Temporary Lodging Expense (TLE), first authorized in the Uniformed Services Pay Act of 1981. It will provide reimbursement for members and their dependents up to $110.00 per day for a maximum of four days for subsistence and lodging expenses actually incurred while occupying temporary quarters in the continental United States incident to a permanent change of station move. Thus far, the Congress has prohibited funding for TLE for military personnel, while TLE for civilians has been increased from 30 to 60 days. Since the FY 1984 Defense Authorization Act withdrew authorization to implement TLE for that year, the Services did not specifically identify funds for this program in their submission for the FY 1985 budget. Unless the Congress withdraws authorization for TLE for FY 1985, the Department desires to implement this vital reimbursement and will do so within the funds appropriated.

An area of the military compensation system that will receive particular attention during the coming year is the military retirement system. The Department of Defense, through the Fifth QRMC, is evaluating alternatives to the current military retirement system, looking for changes that reduce the cost to the taxpayer, while permitting the Services to achieve required levels of readiness. It is important to emphasize, however, that the current retirement system is a major force management tool that provides retention incentives for active-duty officer and enlisted members and thus shapes, to an extent, our entire force structure. The Fifth QRMC has approached retirement reform from this perspective, and has attempted to ensure that any recommended changes will take into account the effects on retention and readiness. We will consider the recommendations of the Fifth QRMC, including the submission of legislation, as appropriate.

(c) Education Incentives

Carefully designed education incentives are an effective means of attracting high-quality personnel to military service and retaining them. In that regard, we are concerned about the effects on retention of the upcoming expiration date of the Vietnam-era GI Bill. As the 1989 expiration date of the program draws near, a sizable number of members eligible for benefits may decide to leave the service in order to use them. Replacing these trained and experienced personnel would be expensive and time consuming. DoD supports extension of the expiration date.

(d) General and Flag Officer Strengths

We solicit the support of the Congress in the much needed and long overdue effort to establish a framework for the management of flag and general officers that will provide the necessary oversight, flexibility, and responsiveness required to administer changing flag and general officer requirements in support of national security objectives. Legislation to establish such a framework has been submitted for the consideration of the Congress.

b. Reserve Military Manpower

The Reserve Components -- the Army Reserve, Army National Guard, Naval Reserve, Marine Corps Reserve, Air Force Reserve, and Air National Guard -- are important elements of the Total Force. The Total Force policy, first articulated by Defense Secretary Laird in 1970, has been further supported and vigorously pursued by this Administration. The Total Force policy places increased reliance in times of crisis on the surge capability of Reserve Components to compensate for smaller active forces. As a result, we realize economies in total defense costs by maintaining significant portions of our total military capabilities in a reserve rather than an active-duty status. Integrating the Reserve Components and active forces into an effective Total Force is now closer to reality because the Reserves are being reequipped with first-line military equipment.

~~(1)~~ Selected Reserve Manpower Strength

Table II.B.5 presents current and projected Selected Reserve manpower end strengths. The projected program reflects continued growth of Selected Reserve manpower, which will increase by 9.9% from FY 1983 to FY 1985.

Selected Reserve manning has improved considerably in recent years due in large measure to congressional support of the Department's initiatives, including full-time Guard and Reserve recruiters, bonus and educational assistance incentives, and full-time support increases. These initiatives, coupled with renewed nationwide public support of the armed forces, give us confidence that the manpower posture of the Guard and Reserve will continue to improve.

Table II.B.5

Selected Reserve Manpower
(End Strength In Thousands)

	Actual FY 1983	Programmed FY 1984	FY 1985
Army National Guard	417	433	447
Army Reserve	266	278	298
Naval Reserve	109	122	129
Marine Corps Reserve	43	44	46
Air National Guard	102	104	108
Air Force Reserve	67	70	75
DoD Total a/	1,005	1,051	1,104

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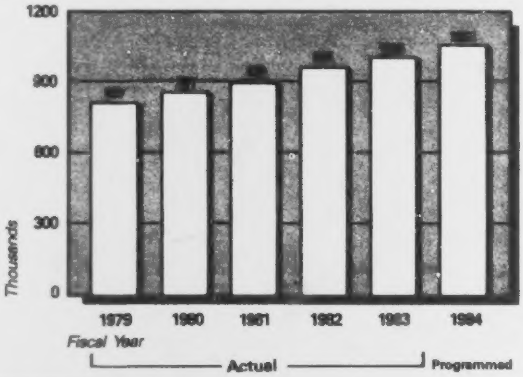
a/ Numbers may not add to totals due to rounding.

The Reserve Components' manpower picture has brightened both in terms of the quality of these forces and their size. Since 1979, Selected Reserve strength has increased each year, as shown in Chart II.B.6.

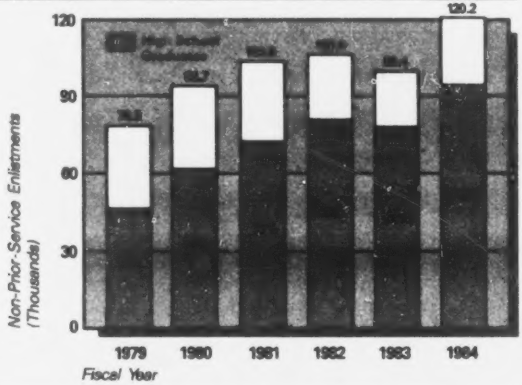
Chart II.B.6
Selected Reserve Manpower
(End Strength)



Supporting the numerical gains are overall improvements in the number of high school graduates entering the Reserve Components. Enlistment bonuses and educational assistance have been major factors in the improved quality of enlistments in recent years.

Chart II.B.7

Reserve Enlistments of High School Graduates



(2) Full-Time Support (FTS) Personnel

One of the most important factors influencing Reserve Component readiness is the number of FTS personnel available to provide day-to-day management, administration, training, and maintenance. By the end of the current fiscal year, the Air National Guard and the Air Force Reserve will have about 27% and 13%, respectively, of their unit personnel in active reserve or technician FTS positions. These levels are expected to increase somewhat with changing missions and conversion to more technologically complex aircraft. FY 1984 FTS levels for both the Army National Guard and Army Reserve will amount to approximately 10% and 6%, respectively, and are expected to increase to 16% and 11% of Selected Reserve strength by FY 1988 in order to bring combat readiness to required levels. In the Naval and Marine Corps Reserve, FY 1984 FTS will amount to approximately 11-12% of Selected Reserve strength, including personnel on active duty in the Marine Corps. The following strengths have been programmed in order to meet the FTS requirements for the Reserve Components through FY 1988.

Table II.B.6

Full-Time Support

	FY 1984 End Strength	Projected FY 1988 End Strength
Army National Guard	40,751	78,800
Army Reserve	16,607	34,000
Naval Reserve	13,846	18,000
Marine Corps Reserve	801	1,700
Air National Guard	27,761	30,200
Air Force Reserve	8,778	9,500
Total	108,544	172,200

(3) Reserve Officer Personnel Management Act (ROPMA)

A comprehensive system of law providing the basis for the appointment and career management of reserve officers was first enacted in 1954. Only piecemeal adjustments to that legislation have been made during the past thirty years. With the significant increase in the role and responsibilities of the Reserve Components as major participants in the nation's defense, we must ensure that this system will provide the numbers and quality of reserve officers we need. We have completed a comprehensive review of these laws and drafted legislation that will be responsive to changing officer requirements over a wide range of strength levels and contingencies. The Reserve Officer Personnel Management Act will allow us to conduct the long-range planning so essential to providing our reserve officers with attractive and meaningful careers and help us attract and retain officers of the proper age and grade who possess the skills and experience we need.

c. Civilians in the Department of Defense

(1) Overview of Civilian Requirements

One of the principles on which our nation was founded was to limit the size of military forces -- to make them no larger than necessary to accommodate our immediate national defense requirements and to provide the framework for the larger forces needed in emergencies. Although this nation's relationships and responsibilities have changed dramatically over the last 200 years, the principle of a relatively small military force remains unchanged.

One of the ways to ensure the success of this policy is through the use of civilians in the DoD. Civilian employees play the major role in logistic support, base operations, and research and development efforts. Civilians also provide a substantial portion of medical and personnel support and personnel training, and perform essential auxiliary activities, including intelligence and communications operations.

(2) Current End Strengths

In FY 1985, the DoD plans to employ 999,453 direct-hire civilian employees and 85,383 indirect-hire civilian employees for a total civilian work force of 1,084,836. Direct-hire civilians are the U.S. citizens and citizens of some foreign countries who work directly for the DoD. Indirect-hire civilians are foreign nationals employed by their own country in support of U.S. forces in accordance with status of forces agreements. The Department reimburses the host country for the pay of the indirect-hire personnel.

In the direct-hire work force, approximately 35% of our employees are Federal Wage System workers. They are the "blue collar" work force that supports depot-level maintenance, supply, and logistics operations. They also maintain and operate our installations. The rest of the direct-hire work force are the General Schedule and Manager employees who support the Department with engineering, scientific, professional, technical, clerical, and administrative efforts.

In order to achieve the Department's program objectives, it has been necessary to increase Defense civilian manpower levels over those of the immediate post-Vietnam era. The increases in civilian manpower over the past few years reflect the Department's efforts to balance human resource requirements with funded workloads.

During the decade of the 1970s, Defense civilian manpower had decreased dramatically because of employment ceilings, hiring freezes, and reduced expenditures. These lower manpower levels caused backlogs in depot maintenance, shipyard operations, and facility repair. The Department was forced to use uniformed personnel to perform duties that could have been done by civilians. These efforts contributed to reduced readiness and lower morale because all the necessary support work was not being done, and uniformed personnel were not being used in their military capacity.

Congressional action on our FY 1984 budget request reduced our civilian manpower levels from a requested 1,072,200 to a level of 1,056,200, a reduction of 16,000 spaces. This action "freezes" our civilian end strength at the FY 1983 levels. The increases we had requested were dedicated to reducing unacceptable backlogs in depot maintenance and to increased efforts in improvement of procurement, supply, and contract administration efforts.

We will use our 2% flexibility authority in FY 1984 to accommodate depot maintenance and spares management efforts that must be accomplished. The Department's FY 1984 civilian end strength will be approximately 1,078,000.

The Department's missions and workloads are increasing. We are being asked to do more, in more places, with more responsiveness than at any other time in our history. In order to perform our missions effectively, we need to maintain the high level of readiness that is supported by our civilian work force. Civilian manpower is a crucial ingredient in the Department's overall readiness condition.

(3) Management Initiatives

(a) Civilian Manpower at Industrially Funded Activities

Imposition of civilian manpower ceilings that are substantially lower than funded workloads does not save money. Low civilian personnel ceilings at industrially funded activities force the Services and Defense Agencies to use inefficient management practices such as removing temporary civilian employees from their rolls for the last day of the fiscal year. The Department has maintained that it would prefer to have civilian manpower levels tied to mission requirements and funded workloads. This is what is done in private industry.

The Congress, in the FY 1983 DoD Appropriations Act, included a general provision, Section 788, that effectively removed civilian manpower ceilings at DoD industrially funded activities. These activities, which include shipyards, air rework facilities, research laboratories, and other manufacturing and production activities, are operated on a profit and loss basis. The Congress has removed the civilian manpower ceilings at these locations as a test of the Department's ability to operate more effectively when not constrained by statutory ceilings. We will provide a report to the Congress on the results of this test.

(b) Commercial Activities

We are proud of our efforts to make better use of manpower and money through the implementation of OMB Circular A-76. This program allows the private sector to provide base-support services to the military if it can do so at a lower cost. In the period FY 1979-83, we conducted over 900 bidding competitions for work performed by approximately 32,000 DoD employees. This competition has resulted in making approximately $140 million available to finance high priority initiatives. In FY 1984, we plan to subject an additional 10,000 civilian and military positions to competition.

(c) Efficiency Reviews

The Efficiency Review Program is designed to make more efficient those activities that are exempt from competition with the private sector. It uses a review process similar to that now used in the Commercial Activities Program, including the development of performance work statements that describe the work to be done and standards to be met. By putting this program into effect, we expect to eliminate unnecessary and inefficient work practices.

(d) Improving Productivity

We are aware of the continuing need for productivity improvement to realize the full potential of the DoD work force. Productivity has been increasing at a rate of 2.1% annually since 1972, a trend we expect to continue.

Productivity improvement efforts have focused on major productivity-enhancing investments that release resources for high-priority tasks. Under the Productivity Investment Fund (PIF), $137 million has been earmarked in FY 1985 for productivity-enhancing capital investments (PECI) expected to produce a lifetime return of approximately $22 for each $1 invested. PIF projects for FY 1981-83 totaled $404 million and should generate annual savings equivalent to 8,800 manpower spaces during the period FY 1982-88. We have already incorporated these projected savings into our requirements. In addition to the PIF, which is sponsored by OSD, each Military Service will be encouraged to establish a minimum funding of $50 million per year to support PECI in its planning for FY 1986-90.

We also anticipate productivity growth to result from other productivity improvement initiatives. These include use of computer-aided work measurement in developing labor standards and broader application of various work force motivation strategies such as quality circles and shared gains programs.

(e) Inter-Service Support

DoD components are also exploring ways to eliminate duplication of services through inter-Service support agreements. These agreements establish single managers to perform specific base operating support functions for all military installations in a particular geographic area.

3. Topics of Special Interest

a. Equal Opportunity

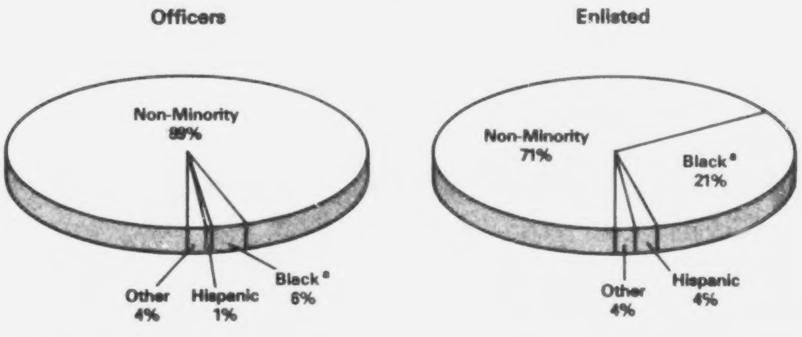
The DoD Human Goals Charter sets forth in very strong terms the abiding commitment of the civilian and military leadership of the DoD to the principle that the individual has intrinsic dignity and worth. In support of the Human Goals Charter, we stress that effective equal opportunity programs can significantly improve our cohesiveness, our readiness, and our total defense capability.

> ***"In all that we do, we must show respect for the serviceman, servicewoman, and the civilian employee, recognizing their individual needs, aspirations, and capabilities."***
>
> ***– DoD Human Goals Charter***

In July 1981, we issued a policy statement prohibiting sexual harassment, describing such behavior as unacceptable conduct to be neither condoned nor tolerated. We directed the Services to issue similar policy statements and requested the Service Secretaries' personal involvement in making this policy work. We have instructed the Services Secretaries to increase the role of women in the Services; to ensure that women are not discriminated against in recruiting or career opportunities; and to break down aggressively any remaining barriers that prevent the fullest use of the capabilities of women in providing for our national defense.

Women will be provided full and equal opportunity with men to pursue appropriate careers in the Military Services for which they can qualify. This means that military women can and should be used in all roles except those explicitly prohibited by combat exclusion statutes and related policy.

Chart II.B.8
Minorities in the Armed Forces
(30 September 1983)



* Black Excludes Black Hispanics

The DoD has also demonstrated its commitment to effective equal opportunity programs by participating in the activities of a number of special organizations. We provided speakers, panelists, brochures, displays, booklets, statistics, and overall support to numerous veterans', minority, and women's groups. DoD publications entitled Black Americans in Defense of Our Nation, Hispanics in America's Defense, and Women in America's Defense were designed, printed, and widely circulated.

Minority enlisted percentages have remained fairly stable at about 30% since January 1981, while the percentage of minority officers has increased from 9.3% to 10.6%. The number of women on active duty also increased (7.9% to 8.9% for officers; 8.6% to 9.3% for enlisted). The Services now have two minority four-star general officers, one Black and one Hispanic. By September 1983, eight women held general/flag rank.

b. Health and Medical Resources

(1) Wartime Medical Posture

(a) Personnel

The number and types of both active and reserve medical personnel fall far short of the total projected wartime requirements. We continue to pursue aggressive programs to increase the wartime availability of pretrained medical personnel for our medical treatment facilities in the continental United States and overseas.

We have taken a number of steps to improve the medical readiness of the reserve forces. The Physician Reservists in Medical Universities and Schools (PRIMUS) and Reserve Flexibility (REFLEX) Programs offer incentives to critically needed health-care specialists, such as surgeons, to participate in medical reserve training. We have also established programs for the early commissioning and the continuing health education of health-care professionals in the Reserve Components.

(b) Hospital Ship

A hospital-ship capability is an essential component of medical support for rapid deployment forces, because it alone can ensure that care will be available for casualties at the outset of combat operations. The minimum capability required for this mission is 24 operating rooms and 2,000 hospital beds, and funds were budgeted in FY 1983 and in FY 1984 to procure that capability. In FY 1983, a final contract was awarded for conversion of the first of two ships with an option for the second. The first ship will become available in 1985 and the second by late 1986.

(2) Peacetime Medical Posture

In peacetime, the military health services system has a dual role: to provide a source of trained health professionals ready to deploy in support of operational contingencies or during mobilization and to provide a source of quality medical care to active duty and retired personnel and their dependents. Health care is provided through a direct-care system of military hospitals and clinics and through the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), and is an integral component of military personnel compensation policy and quality of life.

Our goal is to make this system as cost-effective as possible, while still satisfying both mobilization and compensation requirements. Our progress toward this end is discussed in the Management chapter of this report and basically involves efforts to increase the productivity of the system.

4. Conclusion

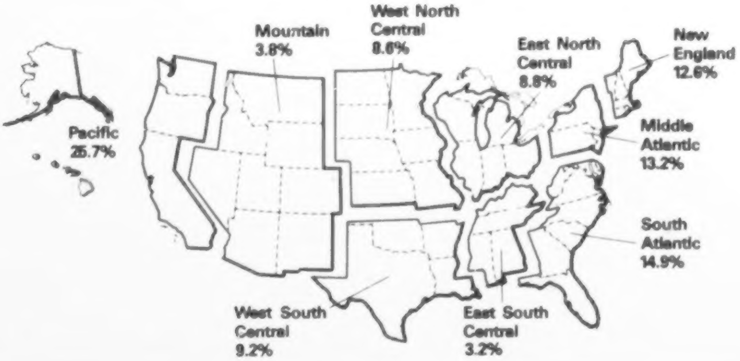
In the past three years, we have seen improvements in every dimension of personnel readiness: strength, experience, skill, and stability. We must have adequate manpower to operate, maintain, and support our expanding force structure at the highest levels of effectiveness and efficiency. Management emphasis by the Services and the Office of the Secretary of Defense has translated congressional support for our personnel programs into increased military readiness. We are committed to continued improvements in the management of our most valuable resource -- people!

C. THE INDUSTRIAL BASE

1. Introduction

The national industrial base encompasses the total industrial capacity to produce and maintain goods in the United States. The defense industrial base refers to the industrial capacity, in both the private and public sectors, available to produce and support materiel required for the armed forces. A very small percentage of the defense industrial base is government owned, since, in accordance with legislative mandate, we place maximum reliance on the private sector for the production of defense goods. There are between 25,000 and 30,000 private-sector prime contractors throughout the U.S. doing business with the Department of Defense (DoD), while the government owns only 72 defense production plants, of which 14 are in "lay-away" status for emergency use. Chart II.C.1 shows the geographic distribution of prime contracts.

Chart II.C.1
Defense Contracting
(Prime Contract Awards Over $10,000 - FY 1982 % by Region)



During 1980 and 1981, a number of studies and reports documented the deterioration of the industrial base. Findings included such symptoms as declining productivity growth, aging facilities, materials shortages, increasing foreign dependency, skilled labor shortages, inadequate defense budgets, and often burdensome government regulations. The situation had been marked by a dramatic decline in the number of contractors willing to do business with DoD. For example, from 1967 to 1981, the number of companies involved in aerospace production declined from 6,000 to 3,500, and 1,500 of these had entered the market since 1979.

While the U.S. industrial base was experiencing its greatest decline in history, with detrimental effects on both the civilian and defense sectors, the Soviet Union was rapidly expanding its industrial base, which is overwhelmingly dedicated to armaments production, often at the expense of the consumer sector.

To reverse the alarming decline of U.S. industry and to counteract a growing Soviet threat, we have taken a number of actions on our own, and have actively supported the President's Economic Recovery Program, which is now beginning to result in industrial expansion and modernization. We established the DoD Acquisition Improvement Program to streamline procedures and make defense contracting a more attractive business venture. We are assisting the educational community in identifying and solving present and potential skilled labor shortages. We have also sought to improve industrial planning by making available to industry data that project five-year defense requirements and show the impact of defense spending in 400 industrial sectors.

2. Current Programs

a. Industrial Base Guidance

We have clarified industrial base guidance objectives, placing emphasis on:

-- Producing and delivering our five-year peacetime procurement program efficiently, effectively, and as quickly as possible;

-- Providing a capacity to surge production of critical items and to respond to the requirements of mobilization;

-- Accelerating the attainment of our programmed sustainability levels for selected critical systems/items; and

-- Increasing industrial preparedness planning and integrating industrial preparedness resource requirements into the Planning, Programming, and Budgeting System.

This far-reaching and innovative guidance is now being institutionalized within the Department. The Military Services and Defense Agencies are devising acquisition strategies that will not only reduce production lead times and the attendant costs, but also improve our ability to surge production of selected weapon systems and consumables. We have discovered that a built-in surge capability (e.g., doubling production within six to twelve months) for many commodities can be created very economically with prudent planning by government and industry. During this next fiscal year, we will ensure that issues of surge responsiveness and avenues for lead-time and cost reduction are refined and aggressively pursued during the acquisition review process. We are also acquiring the industrial preparedness planning resources required to maintain the momentum we have achieved for industrial base capability development.

b. The Defense Production Act

The Defense Production Act of 1950 (Chart II.C.2) provides the principal authority for vital readiness programs directed toward maintaining the national defense industrial base for peacetime, surge, and national emergency requirements. Over the past 30 years, we have relied heavily on this authority in order to maintain ongoing defense contracting and preparedness programs in support of national security objectives. The B-1B bomber, cruise missile, and Blackhawk helicopter are three programs for which we have used the priority ratings available under Title I of the Act in order to maintain production schedules and reduce lead times and costs. Using Title III authority, we awarded a contract to the Gila River Indian Community to establish a demonstration guayule (natural rubber substitute) industry as a means of reducing our dependence on imported rubber.

Chart II.C.2
Defense Production Act of 1950

Title I	Authorizes Allocation of Resources to Prevent Disruption of Production
Title III	Provides for Expansion of Industrial Capability to Meet National Security Needs
Title VII	Establishes Advisory Committees to Allocate Production During Wartime

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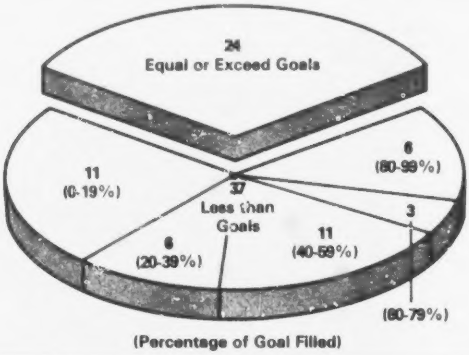
c. National Defense Stockpile

The fundamental purpose of the stockpile, which is managed by the Federal Emergency Management Agency, is to ensure a supply of critical raw materials to support military, industrial, and civilian needs of the United States Chart II.C.3 compares the current inventory with the goals established for the 61 family groups and individual materials in the stockpile.

Chart II.C.3
National Defense Stockpile

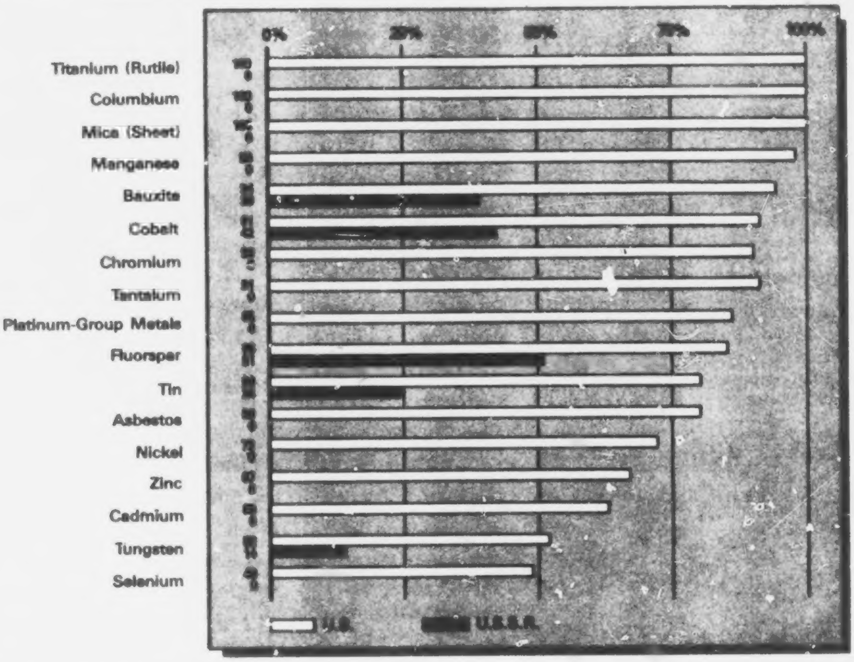


(1) Critical Raw Materials Status

Our requirements for raw materials are included in the President's National Materials and Minerals Program Plan and Report, which was sent to the Congress on April 5, 1982. This report established the first national minerals policy and outlined actions we are taking to reduce our vulnerability in this area, which is highlighted in Chart II.C.4.

Chart II.C.4

Imports of Selected Minerals and Metals*



* Net imports as % of 1982 consumption.

Source: U.S. Bureau of Mines.

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(2) Foreign Dependence

In addition to our dependence on foreign sources for many raw materials, we have also been experiencing a significant decrease in our domestic capability for processing and manufacturing industrial products. We are exploring methods of restoring our domestic industrial capability in areas in which foreign dependence can be damaging to our national security.

d. Manufacturing Technology Program

The Manufacturing Technology Program is a broad-based program to improve the productivity and responsiveness of the defense industrial base by investing in advanced technologies for the production of DoD materiel. This program has been in existence for over 20 years, and we intend to continue to give it priority attention because of its demonstrated high-payoff record and its ability to improve industrial productivity on a broad national basis. One recent accomplishment is a manufacturing process for high-purity gallium arsenide materials used in integrated circuits for missile guidance control systems, which has resulted in savings of $4.8 million to date. Another is a process for inspecting aircraft fastener holes electronically that is ten times faster than manual methods and is expected to provide $20 million in savings on the C-5 wing modification alone.

e. Industrial Property Management

Government-owned industrial property is provided to contractors when it is necessary and in the government's best interest. Examples of property that may be provided to contractors include plants, equipment, assembly tooling, raw materials, and component parts. During FY 1983, we formed the Defense Government Property Council, composed of senior executives from the key staffs involved in property management. The Council will establish policies to ensure effective management of the government's $36 billion investment in industrial property.

f. Government-Industry Relations

An important part of our overall effort to revitalize the industrial base is the communication of potential defense requirements to the private sector. Some of our recent actions in this area are described below.

-- We have updated the Defense Economic Impact Modeling System (DEIMS) to reflect FY 1984 budget estimates. DEIMS projects defense requirements for 400 industrial sectors, 163 occupational categories, and 72 strategic materials. These data, which are available to industry as well as government analysts, can be used to avoid production bottlenecks and limit excessive cost increases caused by shortages of industrial capacity.

-- In May 1983, we published a manual, Defense Procurement and Economic Development, that assists state and local leaders who desire to pursue defense contracts as part of their economic development programs. It has been especially well received, so we feel we are proceeding in the right direction. During the coming year, in cooperation with state and local governments, we will be conducting pilot projects to test this mutually beneficial approach to strengthening our defense industrial base.

-- In addition to assisting in the development of manpower training programs at the state and local levels, we have developed the Regional Occupational Planning and Educational System, which considers the impact of defense expenditures on manpower demands in key manufacturing regions across the country. Our primary objective in this area is to encourage and support national and regional planning for training of skilled manpower to meet future demands.

-- We are forming a government/industry Working Group on the Production of Critical Electronic Components under our Advisory Group for Electronic Devices (AGED). The working group will investigate problems associated with the critical electronic component production base, with emphasis on the advanced development and production phases of the procurement cycle. Initial efforts will be directed toward analyzing problems encountered in transitioning components from R&D to production phases, examining dependence on foreign suppliers, and analyzing component development and production skills needed in the industry. To date, AGED has been concerned with all aspects of electronic component R&D. Establishment of the new working group on production will help close the gap between R&D and production.

g. Industrial Productivity

Improving productivity of defense contractors is a matter of great concern to the Department of Defense. The average annual rate of growth in U.S. manufacturing productivity has declined from 4.0% for the period 1948-73 to 1.2% for 1973-81, a trend that compares unfavorably to that of our foreign competitors.

Higher productivity can improve our defense posture through reducing the unit cost of equipment we procure. Accordingly, the Department of Defense has developed a number of initiatives and is reemphasizing activities already under way that have a positive impact on productivity. One initiative is the test of the Industrial Modernization Incentives Program (IMIP). The objective of the IMIP test is to develop and refine contract incentives, such as contractor investment protection and shared-savings rewards, that encourage defense contractors to use their own funds for productivity-enhancing capital investments. Test data and information on the effects of various incentives will provide a solid basis for future policy development. Although the test is still at an early stage, efforts ranging from discussions to business-agreement implementation are under way with more than 30 contractors.

We are also strengthening our policies to eliminate costly and unnecessary requirements in our weapon system contracts. For example, in development contracts we are placing greater emphasis on specific results required, rather than detailed "how to" procedures for achieving those results. We are also working to exclude the application of premature and untailored specifications, standards, and data items from our requests for proposals and contracts.

3. Conclusion

During the past year, we have begun to see positive results of the policies established and actions taken to revitalize the defense industrial base. The development and maintenance of a strong and viable industrial base must be a cooperative effort by government and industry. Now that the economy has begun its rebound, the DoD must sustain the various programs put into place to keep our acquisitions on schedule.

We are encouraged by the spirit of cooperation that has been evident in resolving national industrial responsiveness issues and the growing public understanding of the need for continuing these initiatives, which are making such a vital contribution to a strong America.

D. MANAGEMENT

1. Introduction

Early in 1981, we established an overall goal -- to strengthen the U.S. defense posture in the most efficient manner possible. Because of the decade-long lag in defense spending, the gap between U.S. and Soviet military investment had widened dangerously. Recognizing this, the public and the Congress supported President Reagan's proposed defense spending increases. At the same time, both the President and the Congress made it clear that, while supporting these increases for the Department of Defense, they expected us to devise better ways of managing the considerable financial, manpower, and industrial resources allocated to defense-related activities.

In approaching this task, we have stressed a management philosophy that strikes a proper balance between centralized policy formulation and decentralized program execution. While prescribing a centralized policy approach, we believe that there must be participation by those who will be responsible for executing those policies. Consequently, we have strengthened the role of the Service Secretaries and made them members of the Defense Resources Board (DRB) -- a body of senior officials who advise the Secretary of Defense on major resource decisions.

While we believe that execution must be decentralized, we likewise believe it must be monitored by the policymakers. For this reason, we have instituted a series of "Secretarial Performance Reviews." Each week, on a rotating basis, the Service Secretaries must report on one or two major programs. During these reviews, the focus is on major issues such as schedule, budget, and performance.

To attain the goal of improved management, the Department has embarked on other major initiatives, and we believe significant progress has been made.

-- We have streamlined the defense planning, programming, and budgeting system by emphasizing planning, reducing paperwork, clarifying the roles of the central staff and the Military Services, and enhancing the role of the DRB.

-- We have improved the weapon system acquisition process by reducing costs and acquisition time, providing for greater stability in long-term procurements, encouraging competition, and strengthening the defense industrial base.

-- Furthermore, we are focusing high-level attention on a number of other major efforts to reduce costs; to eliminate waste, fraud, and abuse; and to improve the way the Pentagon does business in general.

Some of our more significant reform measures are highlighted in the following discussion.

2. Major Management Improvements

a. Planning, Programming, and Budgeting System (PPBS)

The PPBS is the primary decisionmaking system in the Department of Defense. It is through the PPBS process that the Department develops the five-year plan that culminates in the presentation of the President's defense budget to the Congress.

In the planning phase, the role and purpose of the United States in the world environment are analyzed. The product of the planning phase -- the Defense Guidance -- provides goals, objectives, and guidelines to the Military Services and Defense Agencies.

The programming phase applies fiscal resources to the goals and objectives within funding constraints specified in the Defense Guidance. These resource applications are submitted by the Secretaries of the Military Departments and the heads of Defense Agencies. The defense staff, under the guidance and direction of the Defense Resources Board, reviews the submissions in the context of policies and strategies outlined in the Defense Guidance and in terms of feasibility and cost-effectiveness. The final products of the programming phase are the Program Decision Memoranda, which serve as guidance for the ensuing preparation of the budgets of the Military Services and Defense Agencies.

The budgeting phase concentrates on pricing, scheduling, and coordination of major issues. The purpose of this phase is not so much to estimate what something will cost as it is to specify what managers must accomplish with a given amount of money under certain conditions. This phase produces the documentation necessary for a defense budget submission to the Congress.

Upon arriving at the Pentagon in 1981, we found that the PPBS process had become congested with paperwork and needed to be streamlined to allow senior defense management to concentrate on such major problems as cost control.

As a result of our efforts, the planning process has been invigorated by the establishment of a carefully structured and participatory planning process. The evolution and maturation of the planning phase is a major milestone in the history of the PPBS. Planning is, for the first time, an equal partner with programming and budgeting.

We have reduced the documentation requirements for this phase by 50%. Information provided to top managers is now structured in a way that provides focus on the agreement of major programs with defense strategy and goals, rather than on micromanagement of detail that can mask the larger issues.

We have instituted the practice of having the Commanders-in-Chief of the Unified and Specified Commands consult with the DRB, offering their assessments of the threat and regional defense situations. This provides a unique and high-level military insight into the current situation and options for the uncertain future. The Chairman of the Joint Chiefs of Staff provides this kind of advice on a regular basis.

b. Acquisition Management Improvements

While strengthening the PPBS process, we also wanted to make certain that major weapon systems were acquired in an efficient and economic manner. In April 1981, we launched the Acquisition Improvement Program (AIP) -- a concentrated, high-level effort to solve long-standing acquisition problems within the Department. This program offered 32 initiatives to shorten the acquisition process, improve readiness, increase cost savings, and strengthen the defense industrial base. In June 1983, the Deputy Secretary of Defense reviewed the status of the program and determined that 13 of the original 32 initiatives had been incorporated within the acquisition process.

Implementation of these initiatives has served to streamline the acquisition process by reducing the number of required decision milestones, the amount of documentation, and the number of programs reviewed by high-level management.

While progress has been made on another 9 of the 32 initiatives, further action is still required to ensure proper implementation. Among these are a variety of programs and activities that provide incentives to improve productivity and to reward cost-saving performance. Efforts are also under way to reduce the administrative burden represented by unnecessary directives, regulations, and non-cost-effective contract requirements. Other initiatives, intended to simplify the acquisition process through the revision of statutory thresholds and through increased funding flexibility, cannot be implemented without congressional action, which we will continue to seek.

Twelve of the original thirty-two initiatives have been consolidated into several areas for management emphasis. These areas were selected because we believe they offer both the greatest management challenge and the highest potential payoff.

(1) Program Stability

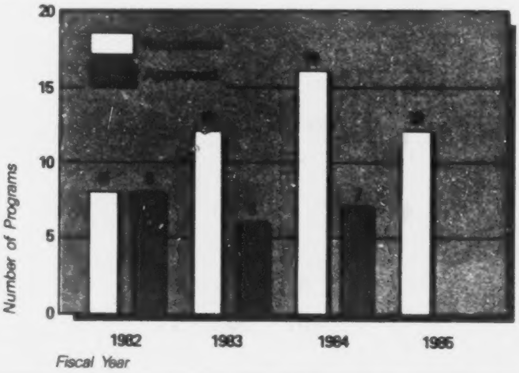
Program instability (year-to-year fluctuations in planned orders) is a major contributor to increases in weapon systems costs and presents the greatest challenge to acquisition reform. Fluctuations in the Department's top-line budget authority have an adverse effect on stability, particularly when programs are deferred and stretched out to absorb reductions. Even minor reductions in the number of units procured in a given year have far-reaching effects on administrative and contractual arrangements and can overturn favorable terms and conditions. A number of our original initiatives were intended to minimize program instability and overcome the problem of affordability. We have made some progress through multiyear procurement, economic production rates, realistic budgeting, better review of new programs, and the reduction and cancellation of lower-priority programs.

(a) Multiyear Procurement

Multiyear procurement has been one of the most important as well as most successful means of achieving greater program stability through the use of more economical lot buys. The expanded use of multiyear procurement was approved in FY 1982, and cost avoidance savings are estimated to be about $4.4 billion. However, recent congressional actions have reduced the effectiveness of this initiative and threaten to impede future progress. Chart II.D.1 shows congressional approval of multiyear procurement candidate programs over a three-year period.

Notwithstanding this adverse trend in program approvals, we are resolved to maintain our commitment to achieve savings and stability through our multiyear procurement initiatives. Twelve new multiyear candidates have been submitted in the FY 1985 budget. A strong effort will be made to win congressional approval.

Chart II.D.1
Multiyear Procurement



(b) Economic Production Rates

Improved program stability can also be achieved by maintaining economic, stable production rates for mature systems for which the design is fixed and production facilities and overhead expenses are well established. Initial progress has been good; we estimate that the 18 programs approved for more-economic production rates in the FY 1983 and FY 1984 budgets will save about $2.6 billion during FY 1982-85. The FY 1985 budget includes more-economic production rates for a number of programs.

This acquisition improvement initiative has been augmented by adding increased emphasis on Producibility Engineering and Planning (PEP). PEP promotes the attainment of a producible design as a product of engineering development and is instrumental in reaching and maintaining economic production rates for individual programs.

(c) Realistic Budgeting

Cost realism is also an essential ingredient of improved program stability. Overly optimistic cost estimates and unrealistically low projections of inflation contributed heavily in the past to unanticipated cost growth. Beginning in FY 1982, an important adjustment was made so that budgeting could be based upon projected inflation rates that more accurately reflect those actually experienced by the defense sector of the economy.

We are also making greater use of independent cost estimates to achieve more accurate cost projections. Independent reviews of cost estimates for 10 programs in 1982 were completed during the budget preparation process. As a result of cost reviews conducted by the Cost Analysis Improvement Group (CAIG), we incorporated more than

$2 billion into the FY 1984 budget to reflect a more realistic view of probable costs for five major weapon systems. During 1983, we expanded independent reviews to cover 25 programs.

(d) Improved Program Review

Increased program stability depends, in the long run, upon improved affordability. To the extent that we can focus our limited resources on high-priority items, we can attain greater program stability. During the past year, the DRB conducted a comprehensive review of all major acquisition initiatives, including new programs proposed by the Military Services and the Office of the Secretary of Defense (OSD). Higher-priority programs (e.g., Army's laser weapons, Navy's nuclear attack submarine, and Air Force's advanced air-to-surface missile) were approved and included in the FY 1985 budget. At the same time, the Services and the DRB have canceled or reduced many lower-priority programs.

(2) Improved Support and Readiness

The Department's effort to reduce costs and acquisition time must be balanced by the need to ensure adequate readiness and supportability once a system has been deployed. We are placing greater emphasis on programs now in development to ensure that they meet future readiness and support goals. Our goal is to establish readiness objectives at the beginning of the system acquisition process. During the past year, changes to improve readiness and support were ordered during reviews of eight major programs.

(3) Encouraging Competition

The advantages of competition are well known. Competition can keep costs down, improve quality, speed innovation, and strengthen the defense industrial base. In view of these benefits, we have launched a concerted effort throughout the Department aimed at strengthening competition.

The Services and the Defense Logistics Agency (DLA) have appointed "advocates for competition" who are charged with reviewing contracts in areas where competition has been lacking in order to remove any barriers to open competition. Various procedures are being used by these individuals to enable them to achieve our competition goals. These procedures include reviewing proposed sole-source purchases at selected dollar thresholds, establishing procedures to make it easier for commercial suppliers to bid on defense contracts, and tying competition initiatives to merit pay performance standards.

We are emphasizing early planning to introduce competition in the development and production of major defense systems and we have recently achieved considerable success by means of various second-sourcing techniques for some missile programs. Planning for second-source application is under way for several other programs as well.

In addition, the Assistant Secretary of Defense (Comptroller) has undertaken a wide range of actions aimed at strengthening competition in computer procurement. He has emphasized the advantages of competition in various computer policies, and is monitoring computer acquisition data to see that progress is being achieved in increasing competition.

The Department's actions on acquisition reform reflect our commitment to substantial improvements in this area. At the same time, we recognize that much remains to be done, and we fully intend to press for even greater gains. We are emphasizing the development of appropriate measurement techniques and information management in order to provide better support for program and budgetary decisions that involve the principles of the Acquisition Improvement Program. We are exploring ways to incorporate AIP initiatives into the acquisition process for major systems and the planning, programming, and budgeting system. Finally, we are making special efforts to inform the Congress of the importance of the AIP and to seek legislative changes where necessary to ensure full implementation.

c. Spare Parts Procurement and Management Improvements

It is not sufficient to concentrate only on major weapon systems. Over the life cycle of these systems, we consume billions of dollars annually in spare parts. For example, there are about 30,000 separate spare parts for aircraft engines alone. Spare parts constitute an important aspect of our defense program.

In recent months, it has been widely reported that the Department has paid exorbitant prices for spare parts. While these reported cases do not represent the norm, there is little doubt that some serious problems exist in spare parts procurement and management. However, it is noteworthy that our own management procedures have uncovered this problem and are being applied to correcting it.

To end price abuses in our spare parts procurements, we recently established a ten-point program, highlighted in Chart II.D.2.

Chart II.D.2

Program to End Spare Parts Price Abuses

1. Incentives for Employees to Find Cost Savings
2. Stern Disciplinary Action Against Employees Who Allow Abuses to Continue
3. Senior Management to Alert Contractors to the Seriousness of the Problem and Our Strong Resolve to Control Prices
4. Services to Make the Competition Advocate Program Work
5. Services to Refuse to Pay Unjustified Price Increases
6. Services to Seek Refunds Where Overcharges Have Occurred
7. Services to Cease Doing Business with Contractors Who Refuse to Meet Contracting Standards
8. Reforms in Basic Contract Procedures
9. Additional Audits and Investigations
10. Secretary's Personal Resolve to Straighten Up the Spare Parts Situation.

We recognize, however, that spare parts procurement pricing is just one facet of the problem. While emphasizing spare parts procurement procedures and costs, we must also pay attention to how they are used and controlled once they enter our inventories. While continuing action on the ten-point program, we are also requiring mandatory application of the DoD Parts Control Program. This program promotes use of military-preferred, standard-piece parts during engineering design, development, production, or modification of equipment and major weapon systems. The program fosters standardization, which leads to greater demand for standard parts, reduction in the variety of parts in inventories, and competition through multiple sourcing.

In addition, we are expanding the training administered to personnel engaged in the procurement of spare parts, and we have accelerated our plans to acquire computer software to assist parts control personnel. We are also working to identify disparities in spare parts prices within and among various procuring activities, and are reviewing existing contracts to address any and all opportunities for improved prices.

d. Efforts to Eliminate Waste and to Prevent and Detect Fraud and Abuse

Chart II.D.3

Activities to Curb Waste, Fraud, and Abuse (FY 1983)

Audits of Internal Management of Defense Operations and Programs
18,467 Reports Potential Savings: $1.6 Billion

Investigative Cases
16,357 Cases Closed
8,023 Cases Referred for Prosecution or Administrative Action
657 Convictions
Fines, Penalties, Restitutions, and Recoveries Collected from Referrals to:
Justice Department: $5.2 Million
Military Departments: $9.6 Million

DCAA Audits
57,782 Reports
$28.6 Billion in Contract Costs Questioned — $9.1 Billion Sustained[a]

Army Corps of Engineers' Contract Audits
487 Reports
$85.8 Million in Contract Costs Questioned — $34.4 Million Sustained[a]

DoD Inspection Organizations
11,831 Reports

Follow-Up Actions Completed
60,055 Audit Recommendations Estimated Savings: $1.4 Billion

Defense Hotline
3,747 Calls and Letters Received

[a] Questioned costs sustained represent those costs questioned from current and prior periods; there is a lag between the time costs are questioned and contracts are negotiated.

We have stepped up our efforts against waste, fraud, and abuse in the Department. The additions to our audit, inspection, and investigative staffs have enabled us to uncover more problems, while our audit follow-up procedures have provided the means to track measures taken to ensure that savings and management improvements are promptly and fully achieved.

The FY 1983 Defense Authorization Act established an Inspector General (IG) for the Department of Defense and transferred the Defense Audit Service, the Defense Criminal Investigative Service, and the Defense Logistics Agency's Inspector General to the DoD IG office. In cooperation and coordination with the Military Departments, the DoD IG has undertaken a full-scale effort to search out waste, fraud, and abuse in DoD (see Chart II.D.3). Detailed information on this effort is presented in his semiannual report to the Congress.

e. Defense Contract Audit Agency Management Initiatives

We have directed the Defense Contract Audit Agency (DCAA) to work with the contract administration offices of the Military Departments and Defense Agencies to strengthen spare parts pricing procedures and to assist in the negotiation of major spare parts purchases. Over and above this specific focus, DCAA will expand its role as an independent audit advisor on procurement in general. Specifically, under the direction of the Assistant Secretary of Defense (Comptroller), DCAA has begun actions to:

-- Investigate areas within the Defense Acquisition Regulations cost principles and Cost Accounting Standards where loopholes, voids, or ambiguity could result in excessive costs to the Department;

-- Employ a series of new audit and reporting techniques for analyzing contractors' total compensation packages (salary/wages plus fringe benefits) and provide contracting officers with a more meaningful range of advisory audit recommendations on projected inflation for use in contract negotiations;

-- Strengthen DCAA's responsibilities for the audit of subcontractors. Because subcontracts represent a substantial portion of costs associated with major weapon systems procurement, we must ensure that fair and reasonable subcontract prices are established as part of prime contract negotiations;

-- Identify and report possible instances of fraud in defective pricing more effectively. Instances of defective pricing will be reviewed against specific criteria to determine if patterns or trends indicate that investigative effort would be appropriate;

-- Develop new audit approaches in such areas as equipment use and maintenance, travel costs, and contractor-originated design changes, to ensure that contractor operations are as cost-efficient as possible;

-- Establish an automated information network designed to keep auditors and audit management apprised of particularly effective audit techniques and procedures. This network will also serve to increase awareness of suspected contractor irregularities; and

-- Undertake a comprehensive review of its internal administrative and management processes, procedures, and systems to improve the efficiency and effectiveness of its operations.

3. Organizational Changes for Improved Management

a. Department of Defense Council on Integrity and Management Improvement

The Council on Integrity and Management Improvement has been established to focus high-level attention on management improvement actions. The Council has established a Department-wide Management Improvement Program, involving the Military Services as well as the Defense Agencies. Under this program, considerable dollar savings and increased efficiency continue to be realized in such areas as inventory control, health care delivery systems, and surplus property disposal.

b. Additional Assistant Secretary Authorizations

In 1981, we requested legislation to restore the five assistant secretary positions eliminated by the previous Administration in 1977. The FY 1984 Authorization Bill contained provisions for six new assistant secretary positions, four of which were contained in the Department's original request. These four positions will be used as an Assistant Secretary of Defense (Development and Support); an Assistant Secretary of Defense (Research and Technology); an Assistant Secretary of the Army (Financial Management); and an Assistant Secretary of the Navy (Financial Management).

In addition to these four positions, the FY 1984 Authorization Bill establishes two positions that were included as the result of congressional initiatives and a desire on the part of the sponsors to give higher visibility to certain functions in the Department. The titles and responsibility of the positions are specifically designated in the bill. They are an Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) and an Assistant Secretary of Defense (Reserve Affairs).

c. Office of Operational Test and Evaluation

The FY 1984 Authorization Bill created an Office of Operational Test and Evaluation. Among its managerial activities, this office will prescribe policies and procedures for conducting operational testing and evaluation of weapon systems. We are currently implementing the provisions of the legislation.

d. Directorate for Management Improvement

We have established a Directorate for Management Improvement under the Assistant Secretary of Defense (Comptroller) to promote management innovations and improvements throughout the Department. This office will also provide a capability for timely and well-organized responses to external management improvement initiatives, such as Reform '88 and recommendations stemming from the President's Private Sector Survey on Cost Control.

e. Foreign Military Sales (FMS)

Foreign Military Sales (FMS) constitute a self-supporting, multibillion dollar program. Under this program, the United States sells defense articles or services to foreign governments to assist them in establishing and maintaining an adequate self-defense posture.

The tremendous growth in FMS over the last several years created significant management problems for the Department. These problems became the focus of our concern, as well as that of the Congress, and prompted us to create a Foreign Military Sales Financial Management Improvement Program (FFMIP) Office. Under the direction of the Assistant Secretary of Defense (Comptroller), the FFMIP office coordinates the FMS financial management improvement activities of the Military Departments and performs comprehensive planning and program control aimed at developing adequate systems for the overall management of the FMS program by the Office of the Secretary of Defense.

4. Other Management Improvements

a. President's Private Sector Survey on Cost Control

When the President's Private Sector Survey on Cost Control (the Grace Commission) was established by Executive Order in June 1982, the Department viewed this as an opportunity to consider additional management reforms that might achieve savings in defense.

The Grace Commission's four reports on the Defense Department were released late last fall. Although the Executive Branch has not completed its formal review process, DoD has completed an initial review of the issues and recommendations and has several summary reactions.

First, we agree with about 70% of the Grace Commission's recommendations. We are especially encouraged by the Commission's support of management initiatives we have already instituted, such as multiyear procurement, economic production rates, enhanced competition, and other improvements to the acquisition process.

Second, our analysis indicates that congressional action is required on over 80% of the Grace Commission's claimed savings. A good example of this type of recommendation is greater use of multiyear procurement. In all cases where recommendations are prudent and where congressional action is required, we plan to send to the Congress recommendations for specific legislation.

Finally, we do not believe that the three-year savings figure of $93 billion that was derived by the Grace Commission is a realistic budget projection for cost savings. This figure is not realistic because of the lack of budget precision in the savings projections; because these savings estimates include an unrealistic 10% inflation projection; because many of these savings estimates are based on unrealistic assumptions; and because there is double counting on duplicative recommendations. Also, many of these recommendations cannot be implemented immediately and could not be in effect until the late 1980s or early 1990s. In spite of these limitations, we expect that the ultimate savings and cost avoidance achieved by the Department in implementing the Grace Commission's recommendations will be substantial.

b. Reform '88

Another major effort that we support is Reform '88, a long-range presidential initiative to improve the administrative management of the federal government. Reform '88 is receiving high-level attention throughout the Department as a means of fostering efficient and effective management and eliminating fraud and abuse. Its impact is already being felt through such activities as detection of weakness in control practices and their correction, improved handling of revenue and disbursements, and collection of debts owed to the government. For example, during the past year, we have accelerated our efforts to collect debts, and have exceeded our FY 1983 debt collection target of $85 million.

As part of the overall Reform '88 initiatives, we are conducting management reviews in conjunction with the budget process. The primary focus of these reviews has been to improve the effectiveness and efficiency of administrative operations and the systems supporting these operations.

c. Military Health Care System

The Military Health Care System has two major parts: the direct care system, which comprises the health resources of the three Services (hospitals, clinics, and physicians and other health professionals), and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The direct care system's primary mission is to achieve a healthy fighting force supported by a medical component prepared for combat. The CHAMPUS mission is to manage a cost-sharing civilian health-benefit program for uniformed services' beneficiaries when direct care from the military health care system is not available. The nationwide rise in health care costs continues to be a major concern. The system must provide a quality health benefit in a cost-effective manner.

Many initiatives have been developed in an effort to reduce health care expenditures without reducing quality and accessibility. These include emphasis on coordinating benefits with other health coverage and expanded fraud and abuse detection activities (e.g., use of the Defense Enrollment Eligibility Reporting System to screen out ineligible individuals, and stricter requirements for use of the military direct care system and CHAMPUS). We are also automating our Uniform Chart of Accounts data collection systems at over 200 facilities worldwide. Our Uniform Staffing Methodologies system is providing data from facilities for better determination of manpower requirements. We have developed the Resource Analysis and Planning System as a multipurpose, decision support system. The Tri-Service Medical Information System program office has now installed nearly 70 subsystems serving over 200 sites. As the integration of these systems comes to fruition, we are able to allocate resources more effectively, operate our health care system more efficiently, and deter fraud and abuse within that system.

5. Conclusion

The Department's management improvement accomplishments and reforms in the way we do business represent good news. However, it is good news of progress, not of completion. We fully intend to continue to press for further internal management improvements and to exert every possible effort to achieve additional economies and efficiencies. We will need the full support of the Congress in this effort.

Part III
Defense Programs

A. LAND FORCES

1. Introduction

a. Force Rationale

U.S. land forces comprise the active and reserve forces of the Army and Marine Corps. These forces contribute to deterrence by exhibiting our capability to conduct ground combat operations, should the peace be broken. In support of their deterrent role, we station forces in Europe and the western Pacific, deploy amphibious forces at sea, and maintain a reservoir of rapidly deployable forces -- both active and reserve -- in the United States.

The various types of contingencies for which we must prepare demand forces of varying sizes and capabilities. For a NATO reinforcement, we need forces that are large enough and heavy enough to defeat the heavily armored, tactically mobile forces of the Warsaw Pact. Deployments to other regions could well require lighter forces -- ones that are agile enough to fight their way across difficult terrain, yet sustainable enough to maintain their combat strength over prolonged periods.

Designing ground forces to perform this multitude of tasks presents a dilemma: those forces most capable of opposing Warsaw Pact forces -- heavier, armored and mechanized units -- are the most difficult to deploy rapidly, while lighter forces -- designed to deploy more rapidly, against increasingly sophisticated threats worldwide -- are less capable on arrival. We partially solve this dilemma by prepositioning equipment and supplies at various locations abroad.

Substantial portions of our light forces -- including the Army's 82nd Airborne Division, 101st Airborne Division (Air Assault), and ranger battalions, and the Marine Corps' three active divisions (with their supporting aviation and combat service support units) -- are organized and trained primarily for rapid-response and forcible-entry operations worldwide. Once deployed, these forces are dependent on timely reinforcement and logistics support to conduct sustained combat operations. A further consideration, then, in designing our land forces is providing adequate combat support (e.g., artillery and combat engineers) and combat service support (e.g., medical care and maintenance) to sustain them in combat.

b. Program Goals

For our land forces to provide the capabilities we need, they must be:

- Structured properly;
- Able to respond quickly;
- Capable of sustained combat; and
- Equipped with modern weapons.

The last point is particularly important. Land forces were hit hard by the spending cutbacks of the 1970s. This resulted in inadequate procurement of modern weapons and equipment, and led to severe equipment shortfalls in many combat units. Our problems were compounded by the massive buildup and modernization of Soviet forces

-- particularly armored and mechanized divisions -- over that same decade. Our program aims at offsetting the trends of the 1970s and restoring the deterrent strength of our land forces.

c. Army and Marine Corps Operations in 1983

In order for our land forces to deter war, they must be capable -- and be seen as being capable -- of fighting and winning. During 1983, the Army and Marine Corps demonstrated our ability and resolve to defend our allies and protect our national interests. Exercise Reforger '83 demonstrated our ability to reinforce NATO with ground and air units. An armored division, an armored cavalry regiment, and a ranger battalion were among the major Army units participating in the exercise. Joining them were 23 additional units from the active force and 39 Reserve Component units.

Operations in the Caribbean Basin and Central America served as a clear demonstration of our commitment to protecting the security of our friends in that region. Approximately 6,000 U.S. soldiers and marines were committed to the rescue mission in Grenada last October, and some 2,500 troops participated in exercise Big Pine II -- the largest U.S./Honduran combined exercise to be conducted since the Latin American exercise program began in 1965.

With their mission "to land and secure positions near Beirut International Airport, to maintain a presence in support of the Lebanese armed forces, and to provide a stabilizing influence," our Marine forces are once again demonstrating this nation's ability to react quickly and effectively to international crises. As part of a 5,200-member multinational peacekeeping force that includes Italian, French, and British troops, the roughly 1,200 U.S. Marines deployed in Lebanon conduct motorized and foot patrols, provide training to the Lebanese armed forces, and participate in humanitarian programs that assist the civilian population.

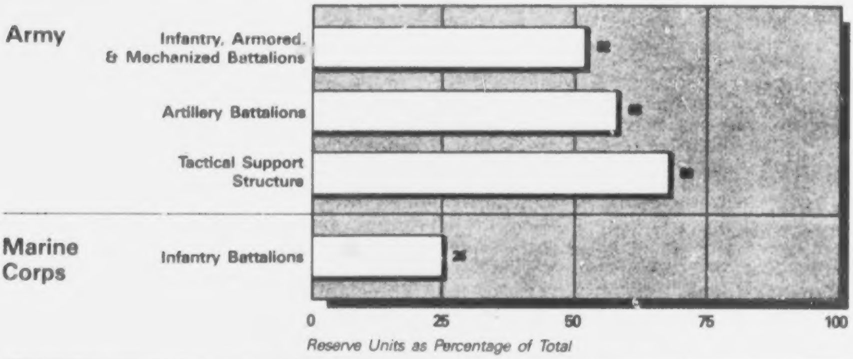
d. Force Composition

In FY 1985, our planned land force structure will consist of 30 divisions. Twenty of those divisions (17 Army and three Marine) will come from the active force; the remaining ten divisions (nine Army and one Marine) will be supplied by the Reserve Components. These divisions, supplemented by separate nondivisional brigades and regiments, form the cutting edge of our land forces. They are supported by a wide variety of active and reserve units and are backed by an extensive training and support base.

In order to take advantage of the economies represented by the Reserve Components, the Army's active combat divisions rely on reserve forces to achieve their full combat potential. Of the 17 active Army divisions, four will be "rounded out" by at least one reserve combat brigade, while four others will use one or more reserve battalions to reach their full complement. In this way, a total of 19 Reserve Component maneuver battalions will be used to round out the active divisions. In addition, the Reserve Components provide a large number of service support units for the active force. Many of these reserve units are scheduled to deploy within 10 days of mobilization.

But our use of Reserve Components extends beyond "roundout" and rapidly deployable support units. Chart III.A.1 shows just how much.

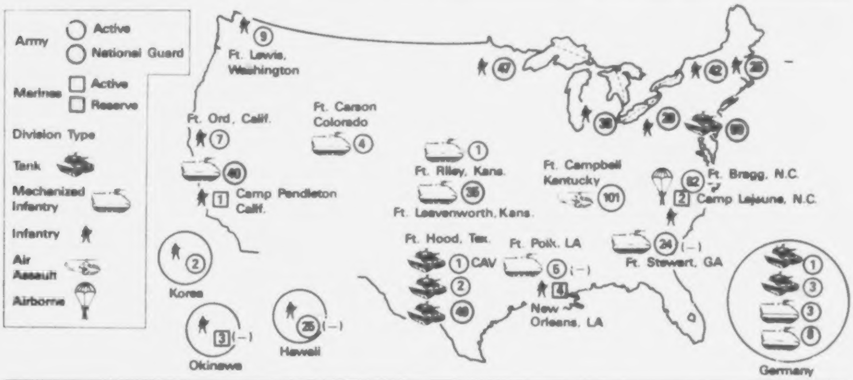
Chart III.A.1
Contribution of Reserve Components
(End FY 1984)



e. Force Disposition

Chart III.A.2 depicts the location of all active and reserve Army and Marine Corps divisions at the end of FY 1984. In addition to the major deployments shown, two brigades of Army divisions based in the continental United States (CONUS) are forward deployed in Europe, and one Marine brigade is stationed in Hawaii. The Army also maintains three separate brigades and regiments in Europe, four active and 21 reserve brigades and regiments in CONUS (not involved in roundout), one active brigade each in Panama and Alaska, and one reserve brigade-sized unit each in Alaska and Puerto Rico.

Chart III.A.2
Deployment of U.S. Divisions


Army
Active
National Guard
Marines
Active
Reserve
Division Type
Tank
Mechanized Infantry
Infantry
Air Assault
Airborne
9
Ft. Lewis, Washington
47
42
26
38
28
50
Ft. Ord, Calif.
7
Ft. Carson Colorado
4
40
1
Camp Pendleton Calif.
1
Ft. Riley, Kans.
35
Ft. Leavenworth, Kans.
Ft. Campbell Kentucky
101
82
Ft. Bragg, N.C.
2
Camp Lejeune, N.C.
2
Korea
Ft. Hood, Tex.
1 CAV
2
49
Ft. Polk, LA
5 (–)
4
New Orleans, LA
24 (–)
Ft. Stewart, GA
3 (–)
Okinawa
25 (–)
Hawaii
1
3
3
8
Germany

2. FY 1985-89 Programs

a. Force Structure

FY 1985 will be a year of reorganization and consolidation for the active Army, following reorganizations in FY 1984 of most of its heavy divisions -- Division 86 -- and the 101st Airborne Division (Air Assault). Those were undertaken to support the introduction of new equipment and to adapt the force to the anticipated rapid pace of future combat by increasing the "leader-to-led" ratio. We will continue to make adjustments to the force structure as more modern weapon systems become available.

We are continuing to improve the mobility and antiarmor capability of our light forces through extensive operational field testing at Fort Lewis, Washington. We will begin to reorganize the 9th Infantry Division into a high-technology light division in FY 1985 -- one year earlier than originally planned. We will also restructure the 7th Infantry Division as a light infantry division (of about 10,000 men) that will be used to examine additional ways to improve the deployability and capability of our light forces. The tank and mechanized battalions currently assigned to the 7th and 9th Divisions will be retained in the force structure as nondivisional units that would be available to reinforce light divisions deploying to high-threat areas. A cavalry squadron in the 3rd Armored Cavalry Regiment that we had originally intended to inactivate in FY 1984 will also be retained. Activations in FY 1985 include a ranger battalion and the initial increments of an additional active division.

Table III.A.1 shows the current allocation of heavy and light forces, by Service and by unit type.

Table III.A.1
Distribution of Heavy and Light Forces
(End FY 1984)

Divisions	Heavy	Light
Active Army	10	6
Army National Guard	4	5
Active Marine Corps	–	3
Reserve Marine Corps	–	1
Total	***14***	***15***
Nondivisional Maneuver Brigades/Regiments[a]		
Active Army	5	4
Army Reserve Components	12	11
Total	***17***	***15***

[a] These units have not been assigned a roundout mission.

Programs for the Special Operations Forces (SOF) focus on improving their capabilities applicable to the lower end of the conflict spectrum (for example, counterterrorism operations). We will add three aviation companies in FY 1985, while continuing to fill out the units activated in FY 1984.

We are also continuing to bring up to full strength the support units activated in FY 1983 and FY 1984, and we will add about 2,000 support structure spaces in Europe and 500 in CONUS. Among the planned activations will be a petroleum, oil, and lubricant (POL) supply company; an area signal company; two ammunition companies; and a POL truck company.

In the Reserve Components, the combat force structure will remain at roughly the same level as in FY 1984. The heavy divisions will convert to the Division 86 design in FY 1985, and we will begin to flesh out the division formed in FY 1984 by consolidating three separate brigades. An additional (existing) brigade will be designated to round out the active force, and the tactical support structure will increase by 12,000 spaces.

FY 1985 will also be a year of consolidation for the Marine Corps. Following the activation of major combat service support units and the reorganization of antitank units in FY 1983 and FY 1984, the Corps' major focus will be on improving readiness.

The Army and Marine combat units available to the U.S. Central Command (USCENTCOM) will remain essentially unchanged in FY 1985 and gradually increase in the years following. When the 9th Division ends its testing and converts to its new configuration, the readiness of those forces will increase markedly. The 12,000 tactical support spaces to be added to Reserve Component units will increase the ability of our land forces to support USCENTCOM without drawing down on forces needed in Europe. The major improvements in the units available to USCENTCOM will be readiness related -- a result of increased manning, additional modern equipment, and increased participation in exercises.

b. Readiness

We are making major improvements in the three areas that contribute to the combat readiness of our land forces -- manpower, training, and materiel.

In FY 1983, both the Army and the Marine Corps exceeded their recruiting objectives, and more than 85% of the non-prior-service enlistees were high school graduates. Increased retention added to the quality and experience of the force. Manpower readiness in FY 1984 and FY 1985 will be enhanced by sharply increasing -- from 45,260 in FY 1983 to 112,800 in FY 1988 -- the full-time manning of Army Reserve Component units. Average full-time manning in those units is projected to increase from 7% in FY 1983 to 14% in FY 1988, with significantly higher percentages in the high-priority, early deploying units. We will continue to improve the readiness of active units by increasing manning levels in FY 1985.

Training at both the individual and the unit level is increasing and becoming more realistic. The Army is increasing the number of students in and the length of its Officer Basic Course; it is also expanding its Primary and Basic Technical Courses for noncommissioned officers in combat support and combat service support specialties. The

Army and Marine Corps are continuing their efforts to improve the training of Reserve Component units: additional full-time support personnel will be devoted to training programs, more units will train at the National Training Center, and selected units will conduct additional training with active units. Other initiatives include the creation of a Physical Fitness Center and Fitness Research Institute, construction of 20 additional troop physical fitness centers, and establishment of a Survival, Evasion, Resistance, and Escape program. Our plans also call for a 35% increase in funding for training ammunition in FY 1985 and for expanded use of training simulators.

Funding for spare parts and depot repair work continues to receive heavy emphasis. Spending in these areas is of great importance, since it yields the quickest, most cost-effective improvements in materiel readiness. The FY 1985 program will reduce the depot maintenance backlog. Funding for initial and replenishment spares will continue to meet the peacetime requirement. The Army's FY 1985 program includes a $146.6 million cash augmentation to the stock fund to support new weapon systems entering the inventory.

c. *Sustainability*

The ability to sustain our land forces in a conventional conflict is a function of the amount of materiel on hand to replace items lost or consumed in combat, the availability of trained personnel to replace soldiers and marines lost in combat, the size of the support forces, and the amount of host nation support available. 1/ We are building our stockpiles of war-reserve munitions toward prudent stockage objectives. Funding for Army and Marine Corps munitions (for both war reserves and training) will rise from $4.7 billion in FY 1984 to $5.9 billion in FY 1985 -- an increase of about 18% after adjusting for the effects of inflation. We are continuing to procure and preposition combat-attrition replacements for major items of equipment. Though we have increased funding for war-reserve spare parts and other secondary items needed to keep our equipment operating in combat, shortfalls will remain for some items. We intend to reach our stockage objectives for those items by FY 1989.

The sustainability of Army and Marine Corps forces also depends on the size and quality of Reserve Component units and on the surge capacity of the training base. The FY 1985 program calls for substantial increases in the trained personnel strength of the Reserve Components -- from 402,900 in FY 1984 to 416,400 in FY 1985 in the Army National Guard; from 261,800 to 282,500 in the Army Reserve; and from 39,600 to 42,100 in the Marine Corps Reserve. The additional personnel will be used to activate new reserve units and to reduce shortfalls in existing ones, thereby increasing the readiness of those units to levels commensurate with their increased responsibilities in the total force. The shortfall in pretrained individual manpower will be reduced slightly in FY 1985, but we will still not be able to meet all of the Army's mobilization requirements. While the mobilization training base will improve in FY 1985, training capacity will remain below wartime needs.

We are also increasing the sustainability of our land forces by improving our support forces and by pursuing additional host nation support agreements. Much of the increase in Reserve Component strength in FY 1985 will be due to the activation of additional support units

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1/ The term "host nation support" refers to facilities and services our allies have agreed to provide in support of U.S. forces.

and the increases in full-time manning. These increases will move us closer to meeting wartime requirements for combat support and combat service support units. We continue to seek host nation support agreements with our NATO and other allies to augment our own wartime support efforts.

d. Modernization

(1) Close Combat

We assign high priority to developing and fielding weapon systems that will enable our land forces to defeat heavily armored forces in close combat on the modern battlefield. The FY 1985-89 program emphasizes the continued acquisition of systems that will improve the firepower, tactical mobility, and survivability of our forces.

M-1 Abrams Tank -- The M-1 tank's superior agility, advanced fire-control system, and modern armor will make it an effective and survivable counter to Soviet armored forces throughout the 1990s and beyond. Unlike previous tanks, the 60-ton M-1 can shoot on the move, delivering highly accurate and lethal fire in day or night. Its 1,500-horsepower turbine engine and improved suspension system enable it to travel at speeds of up to 45 miles per hour, reducing its exposure to enemy fire. The Congress has authorized production of 3,328 M-1 tanks to date. The planned production rate of 60 units per month will allow the Army to reach its goal of fielding 7,058 M-1s by the mid-1990s. In late 1986, we plan to begin fielding an improved version (designated M-1E1) equipped with a 120mm gun. Approximately 50% of the tanks in the M-1 force will eventually carry this gun.

The Bradley Fighting Vehicle (BFV) System -- The BFV provides mechanized infantry and armored cavalry forces with tactical mobility equivalent to that afforded by the M-1 tank, while greatly improving their antiarmor capabilities. The BFV would accompany the M-1 in battle, its TOW antiarmor missiles providing the punch needed to complement the M-1 in knocking out enemy armored forces. By the end of FY 1984, the Army will have procured 2,300 of these vehicles. Our program will, by the beginning of FY 1986, increase the production rate to a maximum of 75 vehicles per month, allowing the Army to achieve its acquisition objective of 6,882 BFVs by the end of FY 1990.

Assault Amphibian Vehicle (LVT7) -- The LVT7 is a lightly armored vehicle [2] designed to transport Marine amphibious assault units from ship to shore. On the ground, it provides an essential measure of tactical mobility and protection for Marine infantry units. By the end of FY 1984, the Marine Corps will have procured 329 LVT7A1s (an improved version of the LVT7), satisfying its acquisition objective. In FY 1985, the Corps will complete a program to upgrade its existing fleet of 984 LVT7s to the new configuration.

Light Armored Vehicle (LAV) -- The LAV will increase the ground combat mobility, survivability, and firepower of the Marine Corps' infantry units. The vehicle will be produced in several versions, designed for use in command and control, recovery, and other operations. The basic vehicle will be equipped with a 25mm cannon. The Corps plans to buy 758 LAVs by the end of FY 1985.

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[2] A lightly armored vehicle protects its occupants from small-caliber weapons fire and fragments from exploding artillery projectiles, grenades, and other munitions.

TOW Missile System -- The Army and Marine Corps have programmed funds to continue procurement of an upgraded version of the TOW antitank missile (the TOW 2), incorporating an improved warhead and guidance system. This weapon, to be deployed with antiarmor forces, will give our soldiers and marines a means of defeating advanced technology armored systems.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
M-1 Tank				
Development:				
$ Millions	104.1	107.3	108.6	87.2
Procurement:				
Quantity	855	840	720	720
$ Millions	1,830.7	1,676.3	1,758.8	2,005.0
BFV				
Development:				
$ Millions	49.6	36.7	45.7	26.3
Procurement:				
Quantity	600	600	710	900
$ Millions	813.2	815.5	1,056.4	1,256.9
LVT				
Procurement:				
Quantity	453	416	244	--
$ Millions	283.6	237.3	120.6	--
LAV				
Development:				
$ Millions	11.1	10.7	11.9	15.7
Procurement: a/				
Quantity	134	236	292	--
$ Millions	94.7	170.6	276.9	--
TOW Missile				
Development:				
$ Millions	2.2	1.9	9.9	7.3
Procurement:				
Quantity	13,000	20,200	21,822	22,014
$ Millions	162.1	217.2	297.5	255.8

---

a/ Includes the basic vehicle and variants.

(2) Land Forces Aviation

(a) Helicopters

The Army and Marine Corps maintain a versatile fleet of helicopters to support their combined-arms teams. These aircraft help detect and engage enemy armored forces; they also transport troops within combat theaters. Because they serve the needs of our forces in so many ways, we must ensure that they continue to contribute the fire support and tactical mobility needed to counter a numerically superior, and qualitatively improving, opponent. Programs to enhance the firepower of attack helicopters, increase the lift capacity of assault-support helicopters, and improve the survivability of both will ensure their continued effectiveness in the decades ahead.

Attack Helicopters -- The AH-64 (Apache) helicopter will add substantially to the antiarmor capability of Army divisions. Equipped with the new Hellfire missile system, the Apache will be able to operate in day or night, in all weather conditions, in all parts of the world. The helicopter is scheduled to be fielded in FY 1985.

In FY 1986, the Marine Corps will begin filling a serious shortfall in its attack helicopter fleet that has resulted from the reduced pace of modernization in the 1970s. 3/ It will equip 44 new AH-1Ts with improved engines, Hellfire air-to-surface missiles, and Sidewinder air-to-air missiles. The 48 AH-1Ts operated by the Fleet Marine Force also will be reengined; the missile systems are now being installed on those aircraft.

Assault-Support Helicopters -- To improve the tactical mobility of its forces, the Army is procuring new UH-60 (Blackhawk) helicopters and modifying its existing fleet of CH-47s (Chinook). A larger, more agile, and less vulnerable aircraft than the UH-1 (Huey) it replaces, the UH-60 will be able to deliver 50% more cargo and troops over greater distances at higher airspeeds, providing commanders added flexibility in employing their troops. The CH-47D modernization program will increase that helicopter's lift capacity by approximately 60%, while improving its reliability and maintainability and reducing its vulnerability. The Marine Corps is increasing the heavy-lift capacity of its helicopter fleet by procuring the three-engined CH-53E (Super Stallion), the free world's largest helicopter.

(b) Developmental Aircraft

Developmental aircraft programs emphasize the use of new technology. The Navy is continuing work on the Joint Services Advanced Vertical Lift Aircraft (JVX), a medium-lift, tilt-rotor aircraft designed to meet the Marine Corps' amphibious assault lift requirements and the Navy's combat search-and-rescue requirements. Tilt-rotor technology provides a means of combining the versatility of vertical-lift aircraft and the range, speed, and survivability of conventional planes. The schedule calls for the Marine Corps to take delivery of the first production model in 1991, with Army and Air Force procurement of derivative versions anticipated by the mid- to late 1990s.

The Army is developing a new family of light rotorcraft (LHX) to replace its aging fleet of AH-1, OH-58, and OH-6 helicopters, which are rapidly approaching the end of their useful service lives. The aircraft will also be used to replace aging UH-1s in those units not slated to receive UH-60s. The aircraft will be produced in several versions, designed to perform scout, utility, and attack missions. Initial deliveries are expected in the mid-1990s.

3/ Two of the Marine Corps' three active attack helicopter squadrons are three aircraft short of their authorized strength. The third squadron is equipped with Vietnam-era AH-1Js, which have no antiarmor capability.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
AH-64				
Development:				
$ Millions	33.6	27.8	16.8	11.5
Procurement:				
Quantity	48	112	144	144
$ Millions	802.1	1,191.7	1,290.2	1,150.3
AH-1T				
Procurement:				
Quantity	--	--	22	22
$ Millions	--	17.8	193.0	202.3
Hellfire [a]				
Development:				
$ Millions	25.3	3.2	2.9	3.4
Procurement:				
Quantity	3,971	4,870	6,464	7,880
$ Millions	247.4	235.5	262.9	298.0
UH-60				
Development:				
$ Millions	8.4	15.0	--	--
Procurement:				
Quantity	96	84	78	78
$ Millions	559.8	433.0	504.8	496.5
CH-47D				
Procurement:				
Quantity	24	36	48	48
$ Millions	260.8	330.3	446.9	438.2
CH-53E				
Procurement:				
Quantity	11	11	8	4
$ Millions	212.3	186.9	234.3 [b]	87.5
JVX				
Development:				
$ Millions	34.9	88.6	199.6	628.1
LHX				
Development:				
$ Millions	--	26.2	75.1	154.9

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[a] Includes Army and Marine Corps funding.

[b] Includes funds for start of multiyear procurement.

(3) Air Defense

Our land forces deploy a balanced mix of air defense systems that provide point and area defense against a wide range of targets. Shorter-range systems -- such as Stinger and Chaparral missiles and antiaircraft guns -- are designed primarily to defend elements of deployed divisions positioned near the front lines (e.g., forward command posts and maneuver units). Longer-range systems -- such as Patriot and Improved Hawk missiles -- protect larger, more widely dispersed areas of the battlefield (e.g., corps command and control facilities and airfields). These weapons are supported and linked by a network of radar, command and control, and electronic warfare systems.

(a) Short-Range Systems

Stinger -- The Stinger is a shoulder-fired, infrared-guided missile system that can be carried by an individual soldier or marine. It is designed to defend against low-altitude attacks at relatively short ranges. The system is being procured jointly by the Army and Marine Corps to replace the aging Redeye. (The Air Force is also procuring the system to help in defending its air bases.) Stinger-Post, an improved version of the missile with increased resistance to enemy countermeasures, will enter production in FY 1984.

Sgt. York Gun -- The Sgt. York is a self-propelled, twin-40mm gun designed to defend forward maneuver elements of heavy Army forces against air attacks. It offers improvements in range, lethality, and survivability over the self-propelled 20mm Vulcan gun it replaces.

Product Improvement Vulcan Air Defense System (PIVADS) -- The Army is proceeding with a program to improve the capabilities of its 20mm Vulcan air defense guns. Planned improvements include modifying the fire control system to increase target-tracking and gun-pointing accuracy. The towed version of the gun will be deployed with active light divisions; the self-propelled version, now operated by heavy divisions, will be transferred to the National Guard as the Sgt. York gun is deployed.

Chaparral -- The short-range air defense missile organic to most active Army divisions, Chaparral will remain in service through the end of the century. To ensure its continued effectiveness, we are upgrading the system with forward-looking infrared (FLIR) sensors that will enable it to engage targets at night and in poor weather. We also are developing an improved guidance system with high resistance to the types of infrared countermeasures we expect enemy aircraft to employ in the future.

Short-Range Air Defense Command and Control (SHORAD C^2) -- To take maximum advantage of the capabilities offered by its new forward-area air defense systems, the Army is developing an improved automated command and control system for use at the division level. Called SHORAD C^2, the system will be able to identify and acquire targets for optically guided missiles such as Chaparral and Stinger, assign priorities among multiple targets, and transmit engagement instructions to air defense system operators. By streamlining the target distribution process and improving the coordination among deployed air defenses, the SHORAD C^2 system will greatly increase the effectiveness of our entire air defense network.

(b) Long-Range Systems

Patriot -- The Patriot is the Army's advanced all-altitude air defense missile. The system incorporates a multifunction, phased-array radar, giving it a significant electronic counter-countermeasures capability and enabling several missiles to be directed to their targets virtually simultaneously. A state-of-the-art system, Patriot will be highly effective against any airborne target likely to be encountered through the end of the century. Beginning in October 1984, we will field the missile with U.S. Army units in Europe, where it will form the backbone of NATO's future air defense system. Several allied nations are also considering procuring the Patriot for their forces.

Improved Hawk (I-Hawk) -- We are proceeding with a program to upgrade the I-Hawk missile system now deployed with Army and Marine Corps air defense batteries. The modifications include installation of a new missile motor and an improved guidance system (to enable multiple missiles to be directed against targets simultaneously) as well as other reliability and maintainability upgrades. These improvements will ensure that our I-Hawk systems will be able to operate effectively in the expected electronic countermeasures environment of the 1990s.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Stinger				
Development:				
$ Millions	20.0	--	13.9	5.9
Procurement:				
Quantity	2,566	1,956	3,316	8,522
$ Millions	240.3	182.8	298.2	681.9
Sgt. York Gun				
Development:				
$ Millions	10.9	--	--	--
Procurement:				
Quantity	96	130	132	144
$ Millions	539.9	559.4	527.7	425.8
PIVADS				
Development:				
$ Millions	1.5	3.8	--	21.8
Procurement:				
$ Millions	--	38.2	33.2	27.7
Chaparral				
Development:				
$ Millions	24.7	21.0	17.6	18.4
Procurement:				
Quantity	--	--	--	--
$ Millions	52.8	17.8	118.3	151.7

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
SHORAD C^2				
Development:				
$ Millions	1.0	40.8	129.4	88.6
Procurement:				
Quantity	--	--	--	--
$ Millions	--	--	--	114.0
Patriot				
Development:				
$ Millions	45.4	83.0	61.5	55.7
Procurement:				
Quantity [a]	12/287	12/440	15/585	18/815
$ Millions	844.8	963.5	1,202.4	1,354.5
I-Hawk				
Development:				
$ Millions	36.6	32.0	18.9	5.4
Procurement:				
Quantity	--	--	--	--
$ Millions	20.7	30.9	82.4	115.1

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[a] Includes fire units and missiles.

(4) Artillery Fire Support

To offset the Warsaw Pact's numerical superiority and near technological parity with NATO in ground maneuver forces, we are improving the ability of our land forces to detect enemy forces and mass large volumes of accurate, effective firepower against them. We are improving the target acquisition and fire control capabilities of our weapon systems, providing our new munitions with improved laser-homing capabilities, and improving our ability to sustain our fire support forces on the modern battlefield.

Target Acquisition -- We have merged the Army's Battlefield Data System (BDS) program and the Air Force's PAVE MOVER program into a single development effort -- the Joint STARS program. (Details are provided in the Deep Interdiction section below.) The remotely piloted vehicle (RPV), also in development, will improve our ability to locate and designate targets for laser-guided weapons and to adjust artillery fire.

Fire Control -- The Army is continuing development of the Advanced Field Artillery Tactical Data System (AFATDS), a new-generation, automated fire-control system that will increase the efficiency and targeting capacity of its firing batteries. The Marine Corps is continuing development of the Artillery Computer System (ACS), a lightweight, battery-operated computer that will provide rapid, accurate gun-pointing data for firing batteries. Entering procurement in the next five years will be the Army's Battery Computer System (BCS), a small computer that will provide firing data for individual guns in a firing battery (to permit more flexible gun positioning and independent automated fire control), and an automated data system that will provide timely and accurate meteorological information to artillery units.

Laser Designators -- Laser designators are used to illuminate and designate targets for laser-guided bombs, artillery munitions (Copperhead), and missiles (Hellfire). They help provide the "precision" for precision-guided munitions. The FY 1985 budget supports continued procurement of Ground Laser Locator Designators (GLLD) for the Army and Modular Universal Laser Equipment (MULE) for the Marine Corps.

Weapons -- The Multiple-Launch Rocket System (MLRS) is a high-rate-of-fire rocket system assigned to general-support artillery units. It can be used to supplement cannon artillery fire or to strike targets (such as air defense systems) beyond cannon range. A single launcher can fire its load of 12 rockets in less than a minute, covering an area the size of six football fields with approximately 7,700 grenade-like submunitions effective against both personnel and lightly armored targets. The Army began deploying the system last year and is using multiyear procurement authority for continued production. It is also participating in a multinational program to develop a warhead with terminally guided submunitions (TGSM) for the MLRS.

We will continue procuring M-109A2 155mm self-propelled howitzers to replace our shorter-range, Vietnam-era M-109s. The increased range of these weapons is needed to return fire on long-range artillery and to provide fire support across the battlefield under rapidly changing conditions.

The Field Artillery Ammunition Support Vehicle (FAASV) is a highly mobile tracked vehicle designed for use with self-propelled artillery units in Europe. It will provide armor protection for ammunition, and will carry ammunition-handling equipment to prepare and supply ammunition for howitzers. The system will be fielded in FY 1985.

Ammunition -- We will continue to build our inventories of improved conventional munitions, rocket-assisted projectiles, 155mm howitzer-delivered scatterable mines, and 155mm laser-guided Copperhead artillery projectiles. We are increasing the size of our stockpile of war-reserve munitions to improve the staying power of our artillery units on the modern battlefield.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
RPV				
Development:				
$ Millions	81.7	132.6	103.1	30.9
Procurement:				
Quantity	--	--	--	--
$ Millions	--	--	144.5	251.9

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
AFATDS				
Development:				
$ Millions	15.0	21.5	33.1	36.2
ACS				
Development:				
$ Millions				
BCS				
Procurement:				
Quantity	146	146	182	80
$ Millions	30.1	28.7	39.7	18.1
GLLD				
Procurement:				
Quantity	--	180	208	240
$ Millions	--	45.6	56.1	59.5
MULE				
Development:				
$ Millions	--	0.5	0.5	0.5
Procurement:				
Quantity	115	134	115	--
$ Millions	39.2	45.4	40.8	--
MLRS				
Development:				
$ Millions	26.1	1.0	1.9	--
Procurement:				
Quantity a/	23,640/72	36,000/76	50,472/44	72,000/29
$ Millions	444.4	545.4	561.9	558.5
MRLS TGSM				
Development:				
$ Millions	2.4	15.7	35.4	42.5
M-109A2				
Procurement:				
Quantity	--	120	70	152
$ Millions	--	87.2	52.4	123.1
FAASV				
Procurement:				
Quantity	54	120	170	230
$ Millions	29.7	59.1	84.2	122.4

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a/ Rockets/launchers.

(5) Deep Interdiction

New technologies are providing our land forces with radically new techniques for defeating armored attacks. We are developing systems that will be able to locate and track fixed and moving targets deep behind enemy lines. Intelligence and fire-control information from multiple sources will be processed by automated systems and distributed to tactical commanders for targeting decisions. Targets will be attacked by aircraft and missiles that deliver a variety of munitions, including terminally dispensed lethal submunitions. Programs that emphasize extended-range target acquisition and deep-attack capabilities include the Joint Surveillance and Target Attack Radar System (Joint STARS), the Joint Tactical Fusion (JTF) program, and the Joint Tactical Missile System (JTACMS).

Joint STARS -- This airborne radar, being developed jointly by the Army and Air Force, will be able to locate and track moving targets at extended ranges. Drawing on the information it provides, our forces will be able to use their advanced missile systems to strike targets deep behind enemy lines.

JTF -- This automated system will process, analyze, and distribute intelligence reports obtained from multiple sources. This information will assist battlefield commanders in assessing the status and disposition of enemy forces and selected targets. For the future, we are developing a more advanced fusion system that will provide direct, real-time intelligence.

JTACMS -- This missile, being developed jointly by the Army and the Air Force, will be able to dispense terminally guided and unguided submunitions at targets deep behind enemy lines. It will exploit the long-range vision of our new target acquisition and attack guidance systems, enabling our forces to direct attacks against enemy follow-on forces, air defense systems, tactical ballistic missile launchers, and command and control centers.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Joint STARS a/				
Development:				
$ Millions	53.2	108.8	206.5	203.1
Procurement:				
Quantity	--	--	--	--
$ Millions	--	12.0	25.5	132.1
JTF				
Development:				
$ Millions	31.2	59.3	124.4	162.6
JTACMS a/				
Development:				
$ Millions	30.8	60.0	114.5	206.0

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a/ Includes Army and Air Force funding.

(6) Tactical Wheeled Vehicles

The Army and Marine Corps are continuing to improve the intratheater mobility of their forces by upgrading their over-age, overmileage fleets of tactical wheeled vehicles. The Marine Corps will begin fielding the High Mobility Multipurpose Wheeled Vehicle (HMMWV) in FY 1984, and the Army will follow in FY 1985. This versatile 5/4-ton vehicle is being procured to replace some jeeps and a number of other vehicles in the 1/4- to 5/4-ton range.

In the 10-ton category, the Army is placing its highest priority on procuring the Heavy Expanded Mobility Tactical Truck (HEMTT). The HEMTT will be produced in five body styles and be used by combat and combat support units to support MLRS, Patriot, and other high-priority systems. The Marine Corps is procuring a variant of the HEMTT, the Logistics Vehicle System (LVS), for its combat support and combat service support units. The LVS will have four interchangeable rear-body units. By integrating the HEMTT and LVS procurement programs, we have been able to accelerate the introduction of the Marine Corps' vehicle by more than a year. Army units began receiving their HEMTTs in FY 1982; the first Marine Corps LVS will be delivered in late FY 1984.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
HMMWV				
Development:				
$ Millions	4.7	--	--	--
Procurement:				
Quantity	2,921	8,517	14,578	17,195
$ Millions	78.8	213.4	386.1	452.7
HEMTT				
Procurement:				
Quantity	2,189	1,231	1,181	1,172
$ Millions	374.1	204.5	200.1	210.8
LVS				
Development:				
$ Millions	--	0.2	0.2	0.4
Procurement:				
Quantity	262	296	708	718
$ Millions	28.2	29.0	66.7	74.3

(7) Tactical Communications, Command and Control, and Electronic Warfare

In equipping our land forces, we seek to provide them the responsiveness and flexibility they need to defeat a numerically superior enemy. But it is not enough merely to provide our forces with modern weapon systems; we must develop effective means of employing those weapons and controlling our forces on the battlefield. To that end, we are developing a variety of command, control, communications, and intelligence (C^3I) systems that will enable tactical commanders to locate and gather information about enemy forces; assist in analyzing that information; provide jam-resistant, secure communications links to firing units; and allow our forces, through the use of electronic warfare, to disrupt enemy communications and intelligence gathering.

Ground Mobile Forces (GMF) Satellite Communications -- The GMF program is designed to provide reliable, jam-resistant communications support to deployed commanders. By using satellite communications to link headquarters in the field, we provide commanders with a means of transmitting orders and intelligence information over long distances. The Army and Marine Corps will procure several hundred GMF terminals and supporting equipment.

Single-Channel Ground and Airborne System, VHF (SINCGARS-V) -- This program will provide secure, jam-resistant VHF radios to replace the 20-year-old equipment now in use with combat battalions and companies. The Army and Marine Corps plan to begin fielding these radios in FY 1985.

Army Data Distribution System (ADDS) -- A secure, jam-resistant digital communications system, the ADDS will be used to transmit data among command and control, intelligence, air defense, fire support, electronic warfare, and other computer systems. It will be fielded beginning in FY 1988.

Maneuver Control System (MCS) -- The MCS is a command and control system designed to provide tactical commanders with information on the status and disposition of their forces and those of the opponent. The system will consist of a network of small computers adapted to military use. A prototype version has been fielded in Europe, where it is undergoing additional development with the direct participation of the users.

Electronic Warfare -- To increase its ability to jam enemy communications, the Army will procure additional tactical jamming systems (MLQ-34), more hand-emplaced expendable jammers, and the EH-60 Quickfix electronic warfare helicopter. Principal modernization programs for tactical intelligence systems include continued procurement of the Improved Guardrail V and Trailblazer (TSQ-114D) systems, improvements to the Quicklook and Teampack (MSQ-103) systems, development of tactical fusion systems, and initial development of the Joint STARS system.

Communications Security (COMSEC) -- The Army is procuring several types of modern COMSEC equipment. These systems provide secure communications links over which commanders can transmit orders and intelligence information without giving the enemy an opportunity to eavesdrop.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
GMF				
Development:				
$ Millions	18.1	16.8	15.9	19.6
Procurement:				
Quantity	--	--	--	--
$ Millions	310.8	261.2	313.3	371.5

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
SINCGARS-V				
Development:				
$ Millions	15.4	16.0	7.8	11.9
Procurement:				
Quantity	175	3,075	8,000	15,700
$ Millions	19.8	49.5	135.4	256.4
ADDS				
Development:				
$ Millions	34.3	25.3	23.2	39.2
Procurement:				
Quantity	--	--	--	--
$ Millions	--	--	--	59.7
MCS				
Development:				
$ Millions	18.2	9.3	25.7	9.5
Procurement:				
Quantity	--	--	--	--
$ Millions	26.0	16.4	27.9	62.4

3. Conclusion

The FY 1985-89 program is aimed at the continuing revitalization of our Army and Marine Corps forces, severely weakened by the defense spending cutbacks of the 1970s and threatened throughout the world by the continued improvement and expansion of the ground forces of the Soviets and their surrogates. The program will create a modern and balanced force, armed with advanced weapon systems and maintained at a high level of manpower and material readiness. The program will produce a force capable of being rapidly expanded by the Reserve Components and prepared for sustained combat operations in locations throughout the world.

B. NAVAL FORCES

1. Introduction

a. Maritime Defense Missions

Naval forces perform several key functions in support of our national defense strategy. On the most general level, they support our forward defense posture, with its network of overseas alliances and other global commitments. Operating in concert with land-based air forces and with the maritime forces of our allies, U.S. naval forces preserve access to vital ocean areas and protect the sea-lanes we depend upon to reinforce U.S. and allied forces overseas. Naval forces also support an active forward defense of key regions on the Eurasian littoral that are integral to our defense system. Primary among these are the nations on NATO's northern and southern flanks, allied nations in the Pacific region, and friendly countries exposed to potential Soviet aggression in the Middle East and Persian Gulf regions.

In peacetime, naval forces support our foreign policy through a series of overseas deployments, often conducted as part of joint exercises with forces from other nations. Apart from these routine deployments, naval forces -- especially the aircraft carriers, other combatant ships, and support ships that form our carrier battle groups -- are deployed overseas as necessary in response to international crises. These deployments serve to deter aggression by potential adversaries while providing tangible evidence of our commitment to protect the safety and security of our allies and friends. Naval forces are particularly appropriate for this role because of their inherent mobility and flexibility and because they can operate in distant regions without having to rely heavily on access to foreign bases.

The operations of our naval forces during the past year have vividly demonstrated their value, both as a deterrent and as a vital element of our forward defense posture. In trouble spots ranging from Central America to the eastern Mediterranean, the full range of naval forces -- carrier battle groups, amphibious forces, and our first reactivated battleship -- was deployed to support allies and friends and to deter potential aggressors. The Navy also conducted major training exercises in several strategic regions. Areas of operation during 1983 included the Northwest Pacific, the Caribbean, the Mediterranean, the Indian Ocean, and the Norwegian Sea. A number of the exercises involved multicarrier operations; in many, our forces were joined by allied navies and other maritime forces, thereby strengthening the cohesion of the Western maritime defense system.

b. Program Goals for Naval Forces

(1) The Navy in 1981

When this Administration took office, we found major weaknesses in our naval forces. Our deployable battle force numbered 479 ships at the end of FY 1980, including 13 aircraft carriers (one of which left the deployable fleet the following year). Amphibious shipping was adequate to lift only one division-sized Marine Amphibious Force. We deemed this force inadequate to support America's worldwide national security interests, especially in light of the need for an expanded military deterrent against Soviet aggression in Southwest Asia.

The fleet also was suffering from serious readiness deficiencies and manning shortfalls. For example, in January 1981, only about 60% of our ships were rated even "marginally ready" for combat, and of those, only about half were rated "fully ready" or "substantially ready." Moreover, low stocks of ammunition would have seriously limited our ability to sustain conventional combat against Soviet forces.

(2) The Growing Soviet Threat

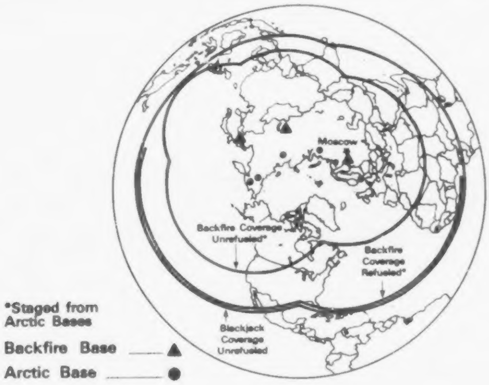
At the same time, the threat posed by Soviet naval forces had grown alarmingly as a result of a massive military buildup sustained over two decades. Particularly noteworthy have been the advances in the Soviet submarine fleet. By far the world's largest undersea combat force, the Soviet submarine fleet contains more than 360 active submarines of all types, including more than 260 attack submarines. Traditionally large, the force has improved greatly in quality over the past decade. This trend is reflected in the steadily increasing percentage of nuclear-powered submarines, which can patrol for extended periods in distant waters and offer the tactical advantages of greater underwater speed.

There are several indications that the Soviet submarine fleet will continue to grow in quality during the next decade. The Soviets are now building five different types of attack submarines -- one diesel-powered and four nuclear-powered classes. These submarines are significantly bigger and better than their predecessors, and they are also quieter, which makes them more difficult for our antisubmarine forces to detect. These improvements are being introduced rapidly into the Soviet submarine force as a result of the high rate of production sustained by Soviet shipyards over the last decade. The threat from this force is diversifying, and in 1984 the Soviets will begin to arm their most modern submarines with long-range, land-attack cruise missiles (similar to the U.S. Tomahawk), fitted with nuclear warheads.

The threat posed by Soviet naval aircraft has also grown dramatically over the last decade. Backfire bombers armed with long-range antiship missiles are the greatest menace. There are now more than 100 Backfires in service with Soviet Naval Aviation, plus a like number in the Soviet Air Force, and production is continuing at a rate of about 30 per year. With an unrefueled combat radius of about 3,000 miles, the Backfire can threaten our naval forces over a large portion of the world's ocean area, as shown in Chart III.B.1. Adding to the air threat, a new strategic bomber with even greater range -- the Blackjack -- is in development and could be deployed as early as 1987.

The Soviets are also building a new generation of surface combatants. A fourth Kiev-class vertical/short takeoff and landing (V/STOL) aircraft carrier is expected to join the fleet this year. The second unit of the 28,000-ton Kirov class of nuclear-powered guided missile cruisers has started sea trials, and a third unit is under construction. The first unit of the new Slava class of conventionally powered guided missile cruisers has entered service, and two other units are being constructed. The Soviets also are building two new types of guided missile destroyers, the Sovremennyy and Udaloy classes. By the end of the decade, we expect them to introduce their first aircraft carrier capable of operating conventional takeoff and landing aircraft, permitting them to conduct air defense and strike operations in regions outside the reach of their land-based aircraft.

Chart III.B.1
Blackjack and Backfire Coverage from Soviet Bases
(2-Way Missions)


Moscow
Backfire Coverage Unrefueled*
Backfire Coverage Refueled*
Blackjack Coverage Unrefueled
*Staged from Arctic Bases
Backfire Base ▲
Arctic Base ●

(3) Administration Initiatives

Soon after taking office, this Administration established a major program calling for an accelerated modernization and expansion of our naval forces. That program is designed to correct deficiencies in the fleet and to maintain the maritime strength we need to support our national strategy. As an immediate goal, we sought to improve the fleet's day-to-day readiness and sustainability. For the longer term, we sought to expand the fleet, building toward the goal of a 600-ship Navy with 15 deployable carrier battle groups and expanded amphibious lift and support forces. At the same time, to meet the threat of increasingly sophisticated Soviet forces, we sought to modernize the fleet.

(a) Fleet Readiness and Sustainability

The increased resources devoted to readiness and sustainability during the past three years are already bearing fruit. The turnaround in readiness has been particularly impressive. Since January 1981, the proportion of the ships in the fleet rated "combat operationally ready" has increased by 17 percentage points, with a 25-percentage-point increase in the two highest categories of readiness. The biggest factor in this bright picture has been the sharp improvement in the personnel situation, although increased funding for spare parts and other maintenance programs has been another major factor.

Sustainability -- a measure of how long our forces can fight effectively in protracted combat -- has also improved significantly, with naval ordnance inventories nearly doubling in value over the past three years. Special attention has been devoted to meeting stockage requirements for torpedoes, surface-to-air and air-to-air missiles, and antiship cruise missiles. We have not yet reached all of our sustainability goals. But with continued funding support -- including a 23% increase in naval weapons procurement requested for FY 1985 -- the Navy will be well on its way to meeting its goals by the latter part of this decade.

(b) Fleet Expansion

Starting with 479 deployable battle force ships in late 1980, the Navy's fleet is projected to grow to 545 ships by the end of FY 1985, as shown in Table III.B.1. Between FY 1985 and FY 1989, as new ships join the fleet and older vessels are retired, the fleet will continue to grow, reaching the Navy's goal of 600 deployable battle force ships by the end of the decade. The FY 1985-89 shipbuilding

Table III.B.1
Deployable Battle Forces
(End Fiscal Year)

	FY 1980	FY 1984	FY 1985
Ballistic Missile Submarines	40	35	37
Strategic Support Ships	8	6	6
Aircraft Carriers	13	13	13
Battleships	0	2	2
Cruisers/Destroyers	107	98	99
Frigates	71	103	110
Nuclear Attack Submarines	74	95	96
Diesel Attack Submarines	5	4	4
Amphibious Ships	66	61	61
Patrol Combatants	3	6	6
Mine Warfare Ships	3	3	4
Mobile Logistic Ships	68	74	74
Combat Support Ships	21	25	33
Total	***479***	***525***	***545***

plan (shown in Table III.B.2 at the end of this chapter) projects a steady rate of ship construction to achieve and sustain the various components of a 600-ship Navy. Individual programs are discussed in later sections of this chapter.

As part of our naval expansion program, we are upgrading the Naval Reserve Force (NRF). For example, by the end of the decade, we will have transferred 24 modern frigates from the active force to the NRF. Reservists will also play a key role in manning our new mine countermeasures ships.

(c) Fleet Modernization

Not only must we expand our forces of ships and aircraft to meet the worldwide commitments of our forward defense strategy; we must upgrade the quality of our forces if we are to meet the Soviet threat of the future. That threat is expected to grow in sophistication over the next several years, the direct result of a very aggressive research and development program being conducted by the Soviet military. Countering the future threat requires that we use our resources in more innovative and efficient ways. The FY 1985-89 defense program funds a balanced mix of modernization programs, described in detail below, to meet this objective.

2. FY 1985-89 Programs

a. Program Priorities

The FY 1985-89 program sustains several initiatives to expand and modernize our general purpose naval forces. The program pursues four broad objectives:

-- Expanding and improving our power projection forces, including carrier battle groups, amphibious assault ships, reactivated battleships, attack submarines, and cruise missiles;

-- Strengthening our ability to defend vital sea lanes and naval task forces against air attacks;

-- Retaining our crucial edge in antisubmarine warfare capabilities in the face of relentless improvements in the Soviet submarine force; and

-- Expanding and modernizing our support forces, including logistics ships and mine warfare forces.

Over the next five years, we will also continue to modernize our force of ballistic missile submarines, adding new Trident submarines and developing the Trident II (D-5) missile. These programs are discussed in the Nuclear Forces chapter.

b. Aircraft Carriers

(1) Multimission Capabilities

Aircraft carriers capable of launching and recovering conventional takeoff and landing aircraft form the core of our multimission carrier battle groups. Although the precise number and mix of escort ships can vary, our planning assumes that a carrier battle group would typically include six surface combatants (cruisers and destroyers) and a small number of attack submarines operating in the "direct support" role. Logistical support is provided by specialized underway replenishment ships that accompany the battle groups.

The modern combat systems deployed with carrier battle groups -- tactical aircraft, surface combatants, and submarines -- provide capabilities across the full range of naval missions. They can project power against targets on land and at sea. They can provide an air-defense umbrella in the skies above a naval task force. They can also undertake antisubmarine operations. Together, these capabilities enable our naval forces to respond rapidly to crises in distant regions of the globe and to conduct maritime operations in areas where we do not maintain airfields and other major land bases.

(2) Force Expansion Plans

From a force of 12 deployable carriers in FY 1981, our program builds to 15 deployable carriers by the end of the decade. (For the remainder of this decade and well into the next, the force will include an additional carrier. The extra unit is needed to maintain required force levels as existing carriers are removed from the force for 28-month periods to have their service lives extended.) Our thirteenth deployable carrier, the Carl Vinson (CVN-70), joined the fleet in FY 1982. In FY 1986, our fourteenth carrier, the Theodore Roosevelt (CVN-71), will enter service. At the end of the decade, delivery of the Abraham Lincoln (CVN-72), one of the two carriers authorized in FY 1983, will give the Navy 15 deployable carriers. In late 1991, when the George Washington (CVN-73), the other carrier authorized in FY 1983, is delivered, we will remove the Coral Sea from the deployable force and use it as a training carrier. Under this plan, the Midway, a carrier built at the end of World War II, will remain in the deployable force through the end of the century.

As the Navy builds its carrier force, the FY 1985-89 program will be putting us well on our way toward achieving the goal of 15 deployable carrier battle groups, with the full complement of escorts, support ships, and carrier-based aircraft. Several programs addressed elsewhere in this chapter contribute to that end.

Under current plans, the Navy will not need to procure any more new carriers until the early 1990s. At that time, to sustain a force of 15 deployable carriers, we may need to start a program to replace the carriers now undergoing service life extension.

(3) Service Life Extension Program

The service life extension program (SLEP) is an integral part of our plan to expand and modernize the carrier force. This program is designed to extend by 15 years the original 30-year service life of eight existing large-deck carriers, thereby providing an economical alternative to new carrier construction. Work on the first carrier in the program, the Saratoga, was completed last year, and the second ship, the Forrestal, has begun its renovations. Funding for the third ship is requested in FY 1985.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Aircraft Carriers (CVN)				
Procurement:				
Quantity	2	--	--	--
$ Millions	6,503.2	11.0	13.1	8.1
Service Life Extension Program				
Quantity	1	--	1	--
$ Millions	717.0	116.4	792.3	152.6

c. Other Power Projection Forces

In addition to expanding and modernizing the carrier force, we are increasing the offensive capabilities of other major components of the fleet. The amphibious fleet is slated for a major upgrade. We are refurbishing and returning to service our four Iowa-class battleships. And we are upgrading the strike capabilities of our surface combatants, attack submarines, and aircraft by arming them with Harpoon antiship missiles and Tomahawk cruise missiles, many of the latter in new vertical launch systems.

(1) Amphibious Assault Forces

The expansion and modernization of amphibious assault shipping is one of the major initiatives of this Administration. We have developed a comprehensive, long-term plan to guide our improvement efforts, the major elements of which are now under way. The plan calls for a major increase in amphibious lift capability, with a goal of achieving the lift to support the assault echelons of a Marine Amphibious Force (MAF) and a Marine Amphibious Brigade (MAB) by 1994 -- an increase of roughly one-third over today's capability. The plan integrates amphibious shipping requirements with the scheduled introduction of new Marine Corps equipment -- CH-53E helicopters, JVX advanced vertical-lift aircraft, heavier artillery pieces, and improved ground vehicles. Taking advantage of the capabilities offered by the new high-speed landing craft now under construction, the plan also develops a new concept of operations calling for launching amphibious assaults from points over the horizon, where assault ships would be less vulnerable to enemy counterattacks.

In peacetime, our amphibious assault forces have proven their worth many times, most recently by supporting the Marine peacekeeping forces in Lebanon. In wartime, amphibious forces provide a global capability for forcibly establishing lodgments ashore.

(a) LHD-1

The LHD-1 Multipurpose Amphibious Assault Ship program is the cornerstone of our plan to expand amphibious lift capabilities. Similar in design to the LHA-1 amphibious assault ship, the 40,000-ton LHD-1 will be used primarily to transport troops, vehicles, and cargo in an amphibious assault. With a capacity to carry three air-cushioned landing craft and large numbers of helicopters, the ship will be particularly useful for supporting over-the-horizon assaults. As a secondary mission, it will serve as a "convertible" carrier from which we could operate V/STOL aircraft.

The lead ship in the LHD-1 program was authorized by the Congress in FY 1984, and we plan to request three more LHDs over the next five years. Our long-range goal is to build a total of 10 or 11 -- enough to replace the seven LPH-class ships scheduled for retirement in the late 1990s and add the capacity we need to meet our expanded lift requirements.

(b) LSD-41 and Variants

Last year, the Congress authorized a fourth LSD-41 dock landing ship. We are requesting funds for the fifth and sixth ships in FY 1985. We need to build at least eight of these ships to replace LSD-28s and, at the same time, increase the fleet's capacity to carry and support new air-cushioned landing craft. Construction of the first three ships is well under way, with the lead ship, the Whidbey Island, scheduled for delivery late this year, ahead of its target date.

Later in the decade, following construction of eight to ten LSD-41s, we plan to begin producing a modified version of the ship, designed to carry two (rather than four) air-cushioned landing craft but more vehicles and cargo. The new design will provide a better match with Marine Corps lift requirements. To meet our amphibious lift goal and to replace the amphibious shipping scheduled for retirement in the next decade and beyond, we plan a steady production rate of two LSD-41s or variants per year.

(c) LPD-4 Service Life Extension

As part of the modernization program for our amphibious forces, we plan to renovate 11 existing LPD-4 landing platform dock ships, giving them 10-15 additional years of service and postponing their retirement well beyond the turn of the century. This will ease a major block retirement problem facing the amphibious fleet, while supporting our goal of increasing lift capability. The five-year program funds seven renovations, the first of which is scheduled for FY 1987.

(d) LCAC

The landing craft, air-cushioned (LCAC) program is the key to the new amphibious assault concept we are developing for the future. Designed to carry the combat and logistical vehicles of a Marine landing force from ship to shore at speeds in excess of 40 knots, the LCAC will enable our forces to launch assaults from tens of miles offshore, outside the reach of many enemy weapons. We plan to buy at least 90 of these craft, enough to support the landing requirements of a MAF and a MAB.

Due to resource constraints, we have funded a somewhat slower buildup in the LCAC production rate than we anticipated last year. Although this will delay LCAC's introduction into the fleet somewhat, it will give us a better opportunity to work out any problems that might be identified when testing of the first production craft begins in 1985. The Congress has authorized 12 LCACs through FY 1984. Our five-year program requests funds for 57 more, including nine in FY 1985.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
LHD-1				
Procurement:				
Quantity	--	1	--	1
$ Millions	55.0	1,365.7	39.2	1,365.5
LSD-41				
Procurement:				
Quantity	1	1	2	2
$ Millions	418.2	415.6	509.6	541.6
LPD-4 SLEP				
Quantity	--	--	--	--
$ Millions	--	--	15.0	94.1
LCAC				
Procurement:				
Quantity	--	6	9	12
$ Millions	59.3	158.8	245.7	325.8

(2) Battleship Reactivations

As part of our program to expand the offensive capabilities of the fleet, we are reactivating our four Iowa-class battleships. Armed with new Tomahawk and Harpoon missiles, these ships are being returned to the fleet at a small fraction of the cost of building new ships with comparable capabilities. They will provide a valuable supplement to the carrier force in performing presence and strike missions, while substantially increasing our ability to provide naval gunfire support for power projection and amphibious assault missions.

Work on the first ship in the program, the New Jersey, was completed in 1983 -- ahead of schedule and within cost targets. The New Jersey has already proven her worth in deployments to the western Pacific, Central America, and the eastern Mediterranean. Work on the second ship, the Iowa, is proceeding smoothly toward a planned completion date early this year. We are requesting funds in FY 1985 for the third reactivation and have scheduled the fourth for FY 1987.

(3) Cruise Missiles

(a) Tomahawk

The Tomahawk cruise missile program is the cornerstone of our effort to increase and diversify the striking power of the fleet. Tomahawk missiles will be based aboard large numbers of surface ships and submarines, giving them a capability to strike enemy surface ships and shore targets beyond the horizon.

Over the past year, we have adjusted the Tomahawk production schedule in order to correct quality control problems that were uncovered during initial production. As a result, our FY 1985 procurement request (180 missiles) is substantially smaller than we anticipated last year. Under the restructured program, we are gaining confidence in the quality of the new missiles coming off the production line, and our ongoing testing program is yielding positive results.

Our first operational Tomahawk missiles have been deployed in armored box launchers on the reactivated battleship New Jersey. Tomahawk is also slated for deployment aboard attack submarines, cruisers, and destroyers. To maximize the number of weapons that can be carried, we are installing vertical launch systems (VLS) on selected classes of ships -- including SSN-688 attack submarines, CG-47 cruisers, DD-963 destroyers, and DDG-51 guided missile destroyers. A newly developed launch mechanism, the VLS is essentially a cell of launch tubes in which different types of missiles and rockets can be clustered. In addition to increasing the number of weapons that can be carried, the system improves reliability and permits multiple launchings in rapid succession.

(b) Harpoon

Production of Harpoon antiship missiles continues, with 1,466 missiles included in the FY 1985-89 program. The Harpoon is deployed on most of our surface combatants and attack submarines, and it can be launched from long-range P-3 patrol aircraft and A-6 attack aircraft as well. We also plan to extend the missile's deployment to F/A-18 strike-fighters, carrier-based S-3 patrol aircraft, and long-range B-52 bombers. Last year, the Air Force conducted live firings of Harpoon missiles from B-52 bombers; it is now modifying two B-52 squadrons to carry the missile.

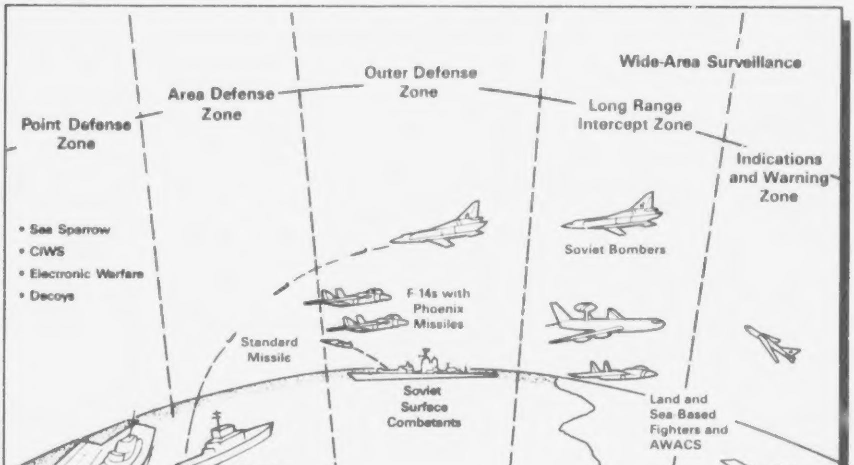
	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Battleship Reactivations				
Quantity	1	--	1	--
$ Millions	348.7	62.5	449.2	96.2
Tomahawk Missiles				
Procurement:				
Quantity	51	124	180	180
$ Millions	221.3	346.0	593.0	549.0
DD-963 VLS Backfit				
Quantity	--	1	3	6
$ Millions	--	21.6	105.6	239.6
Harpoon Missiles				
Procurement:				
Quantity	223	313	354	360
$ Millions	235.4	289.8	361.9	336.0

d. Antiair Warfare (AAW) Programs

Soviet antiship missiles launched from bombers, submarines, and surface ships pose a major threat to our naval forces and sea lines of communication. The best way to counter this threat is to develop systems that can detect and engage Soviet forces before they come within range of launching their missiles. Our antisubmarine warfare programs, discussed in the next section, are designed to improve our ability to destroy enemy submarines before they reach missile launch positions. Likewise, our antiair warfare programs are designed to improve our ability to intercept Soviet bombers before our forces come within range of Soviet missiles. But because these "outer zone" defenses cover broad ocean areas that can never be totally sealed off from enemy submarines and bombers, we must improve our ability to neutralize enemy missiles themselves. Overall, the purpose of such a "defense-in-depth" approach is to inflict losses on attacking forces in a series of engagements by different kinds of defensive systems.

The air defense system employed by our carrier battle groups illustrates the defense-in-depth approach. "Outer zone" protection is provided by an integrated team of airborne early warning aircraft, fighter-interceptors, and electronic warfare aircraft. These forces

Chart III.B.2
AAW Defense in Depth


Point Defense Zone
Area Defense Zone
Outer Defense Zone
Long Range Intercept Zone
Wide-Area Surveillance
Indications and Warning Zone
• Sea Sparrow
• CIWS
• Electronic Warfare
• Decoys
F-14s with Phoenix Missiles
Soviet Bombers
Standard Missile
Soviet Surface Combatants
Land and Sea-Based Fighters and AWACS
AAW Ships
CVN
Soviet Submarines

are used to detect and intercept enemy bombers before they come close enough to launch their antiship missiles. A second zone of "area" defenses is provided by long-range surface-to-air missiles (SAMs) installed aboard antiair warfare ships, which in the future will include CG-47 cruisers and DDG-51 destroyers. Area SAMs protect not only the ships on which they are installed but also the neighboring ships in a naval task force. A "point defense" zone provides a last-ditch defense against air attack. Point defense systems -- including short-range interceptor missiles, guns, decoys, and electronic warfare systems -- are designed to protect only the ships that carry them. Beyond these approaches, we are developing counter-targeting tactics and systems that will force enemy bombers seeking good missile-targeting solutions to move closer to our forces in order to launch an attack, thus increasing the opportunities for our fighter-interceptors to engage them.

(1) Wide-Area Surveillance and Command and Control

To maximize the effectiveness of our outer-zone defenses, we must have warning of an attack early enough to get a large portion of our fighters in position to engage enemy bombers. This requires improved wide-area surveillance. To that end, we are continuing development of a tactical over-the-horizon (OTH) radar system with a detection range of up to 1,800 miles. Deployed in locations from which they can scan likely bomber approach corridors, OTH radars will greatly enhance the effectiveness of our air defenses. The system we are developing will also be "relocatable" to prepared sites, providing an emergency capability to establish surveillance systems in areas where we do not routinely maintain surveillance coverage.

The Integrated Tactical Surveillance System (ITSS), now under development, will provide overall command, control, communications, and intelligence (C^3I) support for our outer-zone air defenses, as well as long-range antiship systems. Essentially a management coordination effort, this system will collect and integrate data obtained from OTH radars and other sensor systems and relay that information to battle forces at sea and to other maritime defense forces. In addition, we are upgrading the Navy's Ocean Surveillance Information System (OSIS). Together, OTH radars and OSIS will be the key elements of our future command and control and wide-area surveillance system.

(2) Land-Based Forces for Maritime Defense

As part of the effort to improve our maritime air defense capabilities, we are enhancing the ability of land-based forces to defend against long-range bombers. Where geographically feasible, we plan to improve joint employment of land- and sea-based fighters by taking advantage of the capabilities offered by wide-area surveillance systems and upgraded command and control systems. Our objective is to detect and engage enemy bombers before they can threaten our naval forces and other ships transiting key sea-lanes.

(3) CG-47 Aegis Cruisers

CG-47 guided missile cruisers will be the centerpiece of our future area defense capability. The Aegis system aboard these ships incorporates the most advanced technologies available for detecting and intercepting high-speed cruise missiles at sea. The system's powerful phased-array radar can detect incoming missiles at long ranges, and its automated fire-control equipment can track and engage many targets simultaneously, even under intense jamming conditions. These capabilities will substantially increase the air defense firepower of our battle groups against coordinated antiship cruise missile saturation attacks.

Last year, after completing a series of sea trials and operational tests of its Aegis system, the lead ship of this new class, the Ticonderoga, began operations with the fleet. Over the next few years, 12 additional units, funded in prior years, will enter service. The FY 1985-89 shipbuilding program includes 13 more of these ships, which will give us 26 Aegis cruisers by the early 1990s and nearly complete the program.

(4) DDG-51 Guided Missile Destroyers

We are requesting authorization in FY 1985 for the lead ship in the DDG-51 guided missile destroyer program. This program is designed to provide a smaller, less expensive complement to the CG-47, allowing the Navy to replace the large numbers of guided missile cruisers and destroyers that will start reaching retirement age at the end of the decade. The five-year program funds the first 14 DDG-51 destroyers.

An 8,450-ton ship with improved survivability features, the DDG-51 will operate with carrier battle groups and surface action groups, or as the primary escort protecting amphibious task forces and groups of support ships. For antiair warfare, it will be equipped with the Aegis weapon system. The design also includes a vertical launch system with space for a mix of 90 surface-to-air missiles, Tomahawk cruise missiles, and antisubmarine rockets. Harpoon missiles installed in separate launchers will complement the antiship capabilities of Tomahawk. For antisubmarine protection, the DDG-51 will be equipped with our most capable sonar systems, including a towed-array system and a hull-mounted active sonar, as well as antisubmarine rockets and torpedoes. For gunfire support operations, it will carry a five-inch gun and the Seafire system for targeting guided projectiles.

(5) Cruiser and Destroyer Modernization

Until enough CG-47 cruisers and DDG-51 destroyers come on line, we will need to extend the service lives and upgrade the capabilities of existing antiair warfare ships. To that end, we are converting guided missile cruisers and some destroyers to carry the advanced Standard surface-to-air missile (SM-2). Compared to the older SM-1 missile it replaces, the SM-2 can cover wider areas and has a higher probability of intercepting incoming missiles. Second-phase improvements are being implemented under the New Threat Upgrade (NTU) program. This package of upgrades includes improvements to shipboard radars and weapon control systems so as to enhance their performance under jamming conditions. The NTU system has been successfully tested aboard the guided missile destroyer Mahan, which is now deployed with the fleet.

(6) Point Defense Systems

Modernization of the self-defense systems aboard surface ships will continue in FY 1985 with procurement and installation of the Vulcan Phalanx Close-In Weapon System (CIWS), the MK-23 target acquisition radar for the NATO Sea Sparrow missile system, and the AN/SLQ-32 electronic warfare system. We are also procuring an improved version of the Sea Sparrow missile, the RIM-7M. In addition, the five-inch Rolling Airframe Missile (RAM) has successfully completed development and initial operational testing. We are requesting funds in FY 1985 to procure the first increment of these missiles for retrofit in selected Sea Sparrow installations. Funding is also requested for procurement of large quantities of decoy systems.

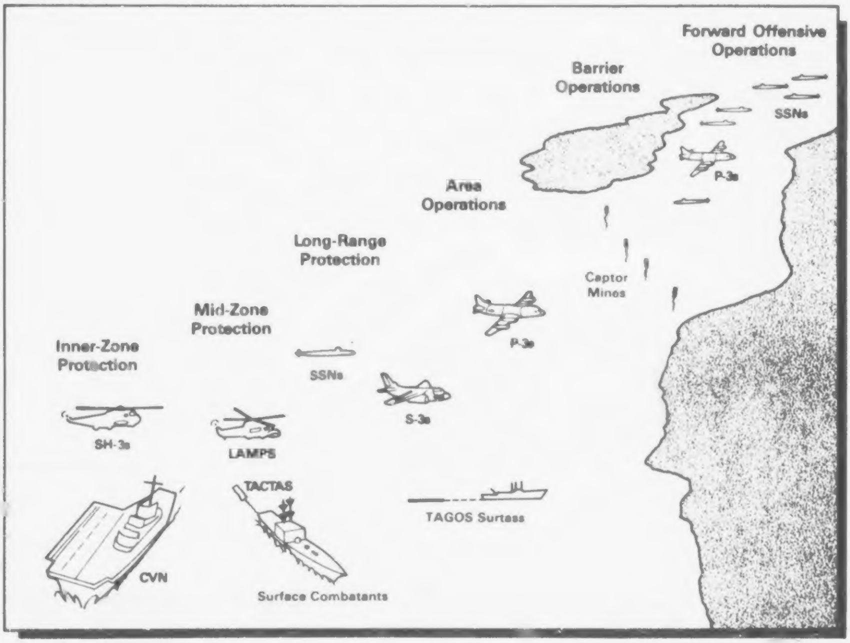
	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
OTH Radars				
Development:				
$ Millions	1.7	28.4	63.7	24.3
Procurement:				
Quantity	--	--	--	--
$ Millions	--	93.2	218.9	233.8
CG-47 Cruisers				
Procurement:				
Quantity	3	3	3	3
$ Millions	2,972.7	3,268.3	3,194.0	3,326.9
DDG-51 Destroyers				
Development:				
$ Millions	138.3	108.6	124.6	129.7
Procurement:				
Quantity	--	--	1	--
$ Millions	--	79.0	1,173.4	279.1
Standard Missiles				
Procurement:				
Quantity	1,150	1,190	1,380	2,430
$ Millions	608.1	625.6	732.0	1,184.1
Phalanx Close-In Weapon System				
Procurement:				
Quantity	37	40	51	43
$ Millions	124.1	122.4	166.3	145.7
Sea Sparrow Missiles				
Procurement:				
Quantity	336	321	327	379
$ Millions	63.5	66.3	73.8	87.1
Rolling Airframe Missile System				
Development:				
$ Millions	16.2	4.2	6.5	2.2
Procurement:				
Quantity	--	--	30	235
$ Millions	--	19.0	18.0	34.6

e. Antisubmarine Warfare (ASW) Programs

Effective defense against the Soviet submarine threat requires a defense-in-depth strategy that both maximizes enemy attrition and affords a high level of protection for our naval forces. The best means of neutralizing enemy submarines is to engage them in forward areas and barriers -- before they come within range of attacking our forces. For this, we rely on long-range P-3 patrol aircraft, CAPTOR (for Encapsulated Torpedo) mines, and attack submarines, supported by undersea surveillance systems. Enemy submarines that escape forward sweeps and penetrate our ASW barriers must contend with a layered defensive screen surrounding our naval task forces and convoys. As a general rule, long-range protection is provided to carrier battle groups by carrier-based S-3 patrol aircraft, land-based P-3 patrol aircraft, and attack submarines operating in direct support. Long-range protection for other naval task forces -- including replenishment groups, amphibious forces, and military convoys -- is provided by P-3 aircraft. Mid-range protection is provided both to carrier battle groups and to other naval task forces by formations of surface combatants equipped with towed-array passive sonar systems and torpedo-armed antisubmarine helicopters. An inner defensive screen for carrier

Chart III.B.3

ASW Defense in Depth


Forward Offensive Operations
Barrier Operations
SSNs
P-3s
Area Operations
Long-Range Protection
Captor Mines
Mid-Zone Protection
P-3s
Inner-Zone Protection
SSNs
S-3s
SH-3s
LAMPS
TACTAS
TAGOS Surtass
CVN
Surface Combatants

battle groups and other task forces is provided by surface combatants equipped with powerful hull-mounted active sonars, while carrier battle groups are afforded additional protection by carrier-based antisubmarine helicopters carrying specially designed active sonars.

(1) ASW Surveillance Systems

The ability to locate enemy submarines within broad ocean areas is essential to the task of countering the large Soviet submarine force. Fixed undersea surveillance systems have long played a key role in this respect. The FY 1985-89 program funds two new systems designed to maintain our advantage in submarine surveillance.

(a) TAGOS Surveillance Towed-Array Sonar System (SURTASS)

TAGOS SURTASS ships, our new mobile long-range surveillance system, will join the fleet in late 1984, following initial tests during the first half of the year. These ships will supplement fixed surveillance systems by extending coverage to ocean areas not presently monitored and by providing a backup system should the fixed systems be incapacitated. The Congress has appropriated funds for 12 TAGOS ships through FY 1984. The five-year program requests funds for six more -- three each in FY 1985 and FY 1986.

(b) Rapidly Deployable Surveillance System (RDSS)

To augment existing surveillance systems, we are developing a new mobile undersea monitoring system, designated the Rapidly Deployable Surveillance System (RDSS). Designed to be dropped from patrol aircraft, the RDSS will allow our forces to provide extended undersea coverage on a time-urgent basis in areas of special interest. The system is scheduled for deployment by the end of the decade.

(2) Attack Submarines

Nuclear-powered attack submarines remain a key element of our ASW defense-in-depth strategy and are an integral part of our forward offensive strategy, especially in antisubmarine operations. Early in a wartime scenario, our undersea forces must be capable of moving into far-forward positions, including waters where Soviet naval forces would operate in large numbers. To carry out this mission, our attack submarines must retain an overall qualitative superiority over Soviet forces.

With the deployment of Tomahawk cruise missiles, our attack submarines will play an expanded role in antiship warfare missions as well as taking on the additional mission of projecting power ashore. These missions -- combined with the ASW missions of carrier escort, barrier patrol, and forward area operations -- establish the basis for our force goal of 100 multimission nuclear-powered attack submarines.

To achieve our goal of 100 multimission SSNs, we have sought a steady acceleration in the rate of submarine construction. With the authorization of three SSN-688s in FY 1984 and the requested authorization of four additional units in FY 1985, the production rate of these highly capable submarines will have doubled since FY 1982. The Congress has authorized 44 SSN-688s to date, and we are requesting funds for 20 more through FY 1989.

To keep pace with the improvements in the Soviet submarine force, we have begun several programs to modify and improve the SSN-688 design. New SSN-688s are being provided additional firepower through the installation of a vertical launch system. A number of modifications will make the SSN-688 submarine quieter. New SSN-688s are also being modified to operate under the ice -- an essential capability for conducting forward patrols in northern waters. Another important improvement, the ability to lay mines, is scheduled for incorporation in FY 1985.

Further improvements to the Los Angeles class are being made in the area of sensor and computer-processing capabilities. The Submarine Advanced Combat System (SUBACS), which will be installed on all submarines authorized in FY 1983 and subsequent years, incorporates the latest in computer technology, thereby improving reliability and helping to ensure that we maintain our technological edge in detection and targeting.

To meet the Soviet submarine threat of the 21st century, we have begun development of a new attack submarine incorporating the latest advances in technology. A key design objective is to make improvements in sound-quieting. The new submarine also will carry more weapons than previous classes, will have improved sensor systems, and will be able to operate under the ice more effectively. These improvements, which cannot be accommodated within the existing SSN-688 hull, are necessary if we are to maintain our qualitative advantage over Soviet submarines and the ability to operate in forward areas. The new-design SSN will also provide the necessary flexibility to react to the inevitable changes that will occur in naval warfare over the next 40 years. Now in a preliminary design stage, the submarine is scheduled for initial production in FY 1989.

(3) Maritime Patrol Aircraft

P-3 maritime patrol aircraft, when provided information from broad-area surveillance systems on the general location of Soviet submarines, offer our best area antisubmarine capability. Fleet exercises have demonstrated their utility as long-range protection forces for carrier battle groups and other naval task forces. Several characteristics of the P-3 system contribute to these capabilities. The aircraft's long range and high endurance enable it to cover large ocean areas. Its large numbers of sonobuoys and advanced data-processing systems help pinpoint the location of enemy submarines. And its large payload of ASW torpedoes provides the capability to translate submarine detections into submarine kills.

The FY 1985-89 program continues production of the latest model in the P-3 series, the P-3C. This aircraft is many times more effective than the older "A" model it replaces. A total of 241 P-3Cs have been authorized through FY 1984, and the five-year program requests funds for 45 more, at a minimum economic production rate of nine per year. All of these will be produced in the Update III configuration, which incorporates improved data-processing equipment and new air-dropped sensors.

(4) Surface Ship ASW Systems

(a) Tactical Towed-Array Sonar (TACTAS)

The long-range detection capabilities of TACTAS will substantially enhance the ASW capability of our surface combatants, providing an essential counter to the continuing increases in the range of weapons carried by Soviet submarines. The SQR-18 towed-array sonar system is being deployed aboard all 46 of our FF-1052-class frigates, including those in the Naval Reserve Force. The SQR-19, a more advanced towed-array sonar system, is now in the final stages of development, following a series of highly successful tests at sea. That system is scheduled for installation later in the decade on DD-963, DDG-993, and DDG-51 destroyers, and on CG-47 cruisers and active FFG-7 frigates.

(b) Light Airborne Multipurpose System (LAMPS)

This year marks the introduction into the fleet of the SH-60B LAMPS MK III antisubmarine helicopter, also known as Seahawk. A derivative of the Army's H-60 Blackhawk, the SH-60B, incorporating advanced electronics, will allow modern surface combatants to exploit the opportunity for long-range ASW engagements offered by the detection capabilities of towed-array sonars. Engagements at extended ranges are essential if our forces are to destroy enemy submarines before they come close enough to launch salvos of long-range antiship missiles and torpedoes.

Current plans call for deploying LAMPS MK III helicopters aboard some 100 surface combatants, including DD-963 and DDG-993 destroyers, CG-47 cruisers, and active FFG-7 frigates. An earlier ASW helicopter, the LAMPS MK I Seasprite, will continue to be deployed aboard reserve FFG-7s and older frigates, which will not be upgraded to support the LAMPS MK III system. An existing shortage of LAMPS MK I helicopters will be eliminated by the early 1990s through the conversion of surface combatants from the LAMPS MK I to the LAMPS MK III configuration and the continued delivery of new and refurbished Seasprite helicopters funded in FY 1984 and prior years.

We are planning a stable production rate of 18 SH-60B helicopters per year, with a total of 90 to be requested over the next five years. With the 66 Seahawks that have been authorized through FY 1984, this will provide at least one SH-60B for each suitably configured surface combatant.

(5) ASW Weapons

We must develop improved ASW weapons able to defeat new Soviet submarines that are faster and quieter, can dive deeper, have greater resistance to hull penetration, and incorporate other qualitative improvements. To that end, we are continuing to improve both our heavy and lightweight torpedoes and our long-range ASW rockets.

(a) MK-48 Torpedoes

We are continuing production of the MK-48 heavyweight torpedo. This weapon, carried by submarines, can be used against both surface ships and submarines. To increase its effectiveness against the new Soviet submarines now entering service, we are developing an upgraded version, called ADCAP (for Advanced Capability). The ADCAP program is on schedule, and we expect to begin deploying the system in the mid- to late 1980s.

(b) Lightweight Torpedoes

We are also continuing to upgrade our inventory of MK-46 lightweight ASW torpedoes. These weapons can be launched from surface ships, patrol aircraft, or antisubmarine helicopters, and they are also carried as a payload in long-range antisubmarine rockets and CAPTOR mines. To provide the near-term improvements needed to counter new Soviet submarines, we are procuring an upgraded version, called NEARTIP (for Near-Term Improvement Program). The program includes both new torpedoes and conversion kits to modify older ones.

For the late 1980s, we are developing the MK-50 torpedo, formerly known as the Advanced Lightweight Torpedo (ALWT). An entirely new torpedo, the MK-50 will be significantly more capable than the MK-46 in terms of speed, diving depth, accuracy, and destructiveness. The program is making impressive progress, with full-scale development under way in FY 1984.

(c) Long-Range ASW Weapons

We are continuing development of two new long-range ASW weapons that will be able to attack enemy submarines outside effective torpedo range. The first of these, the ASW Standoff Weapon (ASW SOW), is slated to replace the aging Submarine Rocket (SUBROC) deployed with the attack submarine force. The second new system, called the Vertical Launch ASROC (VLA), will replace the aging Antisubmarine Rocket (ASROC) deployed on surface ships.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
TAGOS SURTASS Ships				
Procurement:				
Quantity	--	--	3	3
$ Millions	1.8	6.8	200.2	192.6
RDSS				
Development:				
$ Millions	19.1	18.2	11.8	26.5
SSN-688				
Procurement:				
Quantity	2	3	4	4
$ Millions	1,650.4	2,079.3	2,965.4	2,914.9
P-3 Aircraft				
Procurement:				
Quantity	6	5	9	9
$ Millions	286.1	294.5	465.0	503.2
TACTAS				
Development:				
$ Millions	9.8	3.6	--	--
Procurement:				
Quantity	5	12	10	15
$ Millions	71.1	110.0	125.6	162.4

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
SH-60B LAMPS MK III				
Development:				
$ Millions	9.0	2.1	--	7.6
Procurement:				
Quantity	27	21	18	18
$ Millions	620.1	438.0	385.6	376.3
MK-48 Torpedoes				
ADCAP Development:				
$ Millions	159.9	180.9	127.6	64.4
ADCAP MOD Kit Procurement:				
Quantity	--	25	36	96
$ Millions	--	77.7	116.9	285.0
MK-48 MOD 4				
Procurement:				
Quantity	144	144	144	144
$ Millions	119.9	124.5	130.4	158.2
MK-46 Torpedoes				
Procurement and Conversion:				
Quantity	440	1,200	1,565	1,521
$ Millions	152.7	215.3	257.8	313.2
MK-50 Torpedoes				
Development:				
$ Millions	104.2	115.1	143.3	147.3
Vertical Launch ASROC				
Development:				
$ Millions	--	29.8	26.6	27.1

f. Support Forces

While we are expanding and modernizing the combat capabilities of our naval forces, we must not neglect the less glamorous, but no less important, support forces. Indeed, the demand for support ships has grown as a result of fleet expansion and a stepped-up tempo of operations in distant waters. At the same time, our existing support forces are aging and in need of replacement. To meet these demands, the FY 1985-89 program funds several programs to modernize and expand the support fleet, with particular emphasis on underway replenishment ships. We also are improving mine countermeasures capabilities -- a mission area that has been neglected in the past.

(1) Multiproduct Station Ships

The battle-group concept of operations requires one multiproduct ship (AOE or AOR) for each carrier battle group, to provide fuel, ammunition, and stores. As we move toward our goal of 15 deployable carrier battle groups, we must add four new multiproduct ships to the 11 we now have. The five-year program funds three new AOEs, the first in FY 1986.

(2) Fleet Oilers

To keep our multiproduct station ships supplied with fuel, fleet oilers perform shuttle services between battle groups at sea and forward bases. The TAO-187 construction program, begun in FY 1982, will fill an existing shortage of oilers and provide replacements for the 30-year-old oilers now operated by the Military Sealift Command. Fourteen TAO-187s are included in the FY 1985-89 shipbuilding program, adding to the four ships authorized through FY 1984. We also plan to modify existing AO-177 oilers to increase their fuel-carrying capacity. Funds for the first of these conversions will be requested in FY 1988.

(3) Mine Warfare Forces

The Soviet Union maintains the world's largest and most capable inventory of naval mines. Our aging force of minesweeping ships and helicopters is only marginally effective against this threat. To improve mine countermeasures capabilities, we are procuring two new classes of ships and a new type of minesweeping helicopter.

We are also requesting funds to continue procurement of new mines, which will allow us to exploit more fully the geographic bottlenecks facing the Soviet Navy.

(a) Mine Countermeasures Ships

Last year, we began construction of the first in a new class of mine countermeasures ships, the MCM-1 Avenger. MCM-1 ships will both improve our minesweeping capability and provide our forces with a capability to hunt and neutralize advanced Soviet mines that cannot be countered by sweeping techniques. Five of these ships have been authorized through FY 1984. The nine ships included in the FY 1985-89 shipbuilding plan complete the program.

A second new type of mine countermeasures ship, the MSH-1, will augment MCM-1 ships during initial harbor clearance and breakout operations. The MSH-1 mine-hunter will be equipped with advanced combat systems similar to those on the MCM-1, but will be smaller and less expensive. The Congress authorized the lead ship of this class in FY 1984. To complete the 17-ship program, the five-year shipbuilding plan contains an additional 16 vessels.

(b) Mine Countermeasures Helicopters

The FY 1985 budget includes a request for funds to begin procuring a new mine countermeasures helicopter, the MH-53E. A modified version of the CH-53E cargo helicopter, the MH-53E offers significant improvements over the older RH-53D minesweeping helicopter. Specific improvements include longer flight time and an ability to tow heavier, more capable mine countermeasures devices. The five-year program procures 31 MH-53Es, toward a planned goal of 44.

(c) Mines

We are continuing procurement of three types of mines. The CAPTOR mine is designed for use in deep ocean areas, where it keeps watch against enemy submarines transiting antisubmarine barriers. The Submarine-Launched Mobile Mine (SLMM) gives us the capability to conduct covert mining operations in enemy waters. The Quickstrike mine is designed for use in shallower waters, such as enemy harbors and other ocean chokepoints, and can be deployed by aircraft or surface ships.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Multiproduct Ships				
Procurement:				
Quantity	--	--	--	1
$ Millions	--	--	--	815.0
Fleet Oilers				
Procurement:				
Quantity	1	2	3	3
$ Millions	163.8	328.5	564.1	596.9
MCM-1 Ships				
Procurement:				
Quantity	1	3	4	4
$ Millions	118.0	288.7	360.0	405.7
MSH-1 Ships				
Procurement:				
Quantity	--	1	-	1
$ Millions	--	65.0	--	236.4
MH-53E Helicopters				
Procurement:				
Quantity	--	--	2	10
$ Millions	--	--	58.6	218.7
Captor Mines				
Procurement:				
Quantity	300	300	300	--
$ Millions	108.2	111.2	135.2	--
SLMM				
Procurement:				
Quantity	266	242	280	280
$ Millions	22.9	23.3	24.5	25.8
Quickstrike				
Procurement:				
Quantity	--	--	--	--
$ Millions	32.2	34.9	35.7	56.5

g. Rapid Deployment Forces

The Navy has begun a large number of sealift enhancement programs to support our rapid deployment forces. These are described in the Force Projection chapter.

3. Conclusion

Over the past three years, we have built a solid foundation for strengthening our maritime defense capabilities. The FY 1985-89 program builds on that foundation and continues that momentum. We are well on our way to a 600-ship Navy. Progress must be sustained if we are to build a balanced fleet with the full range of capabilities needed to counter the growing threat from Soviet military forces.

Table III.B.2
FY 1985-89 Shipbuilding Program

Type of Ship	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1985-89 Five-Year Total
Trident (Ballistic Missile Submarine)	1	1	1	1	1	5
SSN-688 (Attack Submarine)	4	4	4	4	4	20
New SSN (Attack Submarine)	—	—	—	—	1	1
CG-47 (Guided Missile Cruiser)	3	3	3	2	2	13
DDG-51 (Guided Missile Destroyer)	1	—	3	5	5	14
LHD-1 (Amphibious Assault Ship)	—	1	—	1	1	3
LSD-41/Variant (Landing Dock Ship)	2	2	2	2	2	10
MCM-1 (Mine Countermeasures Ship)	4	4	1	—	—	9
MSH-1 (Mine Hunter-Sweeper)	—	4	4	4	4	16
AOE (Multipurpose Stores Ship)	—	1	—	1	1	3
AE (Ammunition Ship)	—	1	1	1	1	4
AR (Repair Ship)	—	—	—	—	1	1
TAO-187 (Oiler)	3	3	3	3	2	14
TAGOS (SURTASS)	3	3	—	—	—	6
TAGS (FBM Support Ship)	2	—	—	—	—	2
New Construction	23	27	22	24	25	121
CV (Aircraft Carrier) SLEP	1	—	1	—	—	2
BB (Battleship) Reactivation	1	—	1	—	—	2
LPD-4 (Landing Platform Dock Ship) SLEP	—	—	1	3	3	7
AO ("Jumbo" Oiler) Conversion	—	—	—	1	2	3
TAK (FBM Cargo Ship) Conversion	1	—	—	—	—	1
TAGM (Range Instrumentation Ship) Conversion	—	—	1	—	—	1
AGS (Sound Testing Barge) Conversion	—	1	—	—	—	1
TAVB (Aviation Support Ship) Conversion	1	1	—	—	—	2
TACS (Crane Ship) Conversion	2	—	—	—	—	2
Conversions/SLEPs/Reactivations	6	2	4	4	5	21

C. TACTICAL AIR FORCES

1. Introduction

To protect our national interests and meet the global commitments of our forward defense strategy, our tactical air forces must be able to respond rapidly to aggression, wherever it may occur. A well-trained and properly equipped tactical air force can quickly destroy land and sea targets, as well as provide an air defense umbrella in support of ground and naval forces.

a. Program Goals

We depend heavily on tactical air power to counter the significant numerical advantage in ground forces held by the Soviet Union and its Warsaw Pact allies. Our forces have long been considered superior to the Soviets' in terms of air combat capabilities. But in the face of the massive buildup and modernization of Soviet forces, our advantage has been diminishing.

Already possessing an inventory of more than 5,000 fighter and attack aircraft, the Soviets are continuing to produce tactical aircraft at a rate higher than our own. And new generations of aircraft, with sharply improved combat capabilities, are expected to join their forces in the near future. Backed by a formidable array of ground-based air defense systems, these aircraft could seriously contest ours for superiority in the air, while posing a significant threat to our forces on the ground and at sea. Countering that threat will require continued improvements in the combat effectiveness of our tactical air forces

The FY 1985-89 program, therefore, focuses on four broad objectives:

-- Improving the combat readiness and sustainability of our tactical air forces through better training and increased stocks of weapons, munitions, and spare parts;

-- Modernizing the active and reserve components with F-15, F-16, F/A-18, and AV-8B aircraft as well as with improved air-to-air and air-to-ground weapons;

-- Enhancing electronic warfare, tactical communications, and air defense suppression capabilities; and

-- Improving target acquisition, surveillance, and warning capabilities.

b. Force Structure

Our tactical air forces consist of fighter and attack aircraft, and a variety of special-purpose aircraft that support them in combat.

Fighter aircraft, armed with air-to-air missiles, maintain control of the skies above land and naval forces, protecting them from air attacks (the "counterair" mission). Fighter and attack aircraft, armed with bombs and guided missiles, deliver attacks against targets on land or at sea. They can attack enemy formations in close proximity to friendly forces (the "close air support" mission) or strike targets well behind enemy lines (the "interdiction" mission).

Support aircraft assist fighter and attack forces in carrying out their combat missions. The missions of these aircraft fall into the general categories of airborne early warning, command and control, tactical reconnaissance, electronic warfare, defense suppression, and special operations.

(1) Air Force Aircraft

The Air Force's fighter force structure consists of 37 wing equivalents -- 25 in the active force and 12 in the Air National Guard (ANG) and Air Force Reserve. Each wing typically contains three squadrons of 24 aircraft each. (Combat support units, such as those composed of EF-111 electronic warfare aircraft, are generally organized into squadrons of 18 to 24 aircraft.) By the end of FY 1989, we will have the equivalent of 40 tactical fighter wings -- 27 active and 13 ANG and reserve.

In support of our fighter forces, the active and reserve Air Force components operate two electronic warfare squadrons, five defense suppression squadrons, fourteen tactical reconnaissance squadrons, eleven tactical command and control squadrons, and eight Special Operations Forces (SOF) squadrons. By the end of the decade, we will have modernized several elements of the support forces and added one reconnaissance squadron.

The force also includes seven squadrons of B-52G aircraft that are assigned general purpose, as well as strategic nuclear delivery, missions. These bombers, together with strategic reconnaissance and tanker aircraft, provide a highly responsive, long-range force designed to perform a variety of conventional missions, including naval minelaying, antiship attack, and conventional bombing.

(2) Navy and Marine Corps Aircraft

Unlike Air Force wings, which generally consist of only one type of aircraft, Navy and Marine Corps air wings include a mix of aircraft types. A typical active Navy carrier air wing consists of nine squadrons (approximately 86 aircraft): two fighter squadrons; two "light" attack squadrons; one "medium" attack squadron; plus supporting elements for airborne early warning, antisubmarine and electronic warfare, reconnaissance, and aerial refueling operations.

An active Marine Corps air wing typically consists of 23 to 25 squadrons (338 to 370 aircraft in all): four fighter/attack squadrons; two or three "light" attack squadrons; one or two "medium" attack squadrons; plus supporting elements for electronic warfare, reconnaissance, aerial refueling, transport, airborne assault, observation, and tactical air control.

When this Administration took office, the Navy had 12 active carrier air wings. Consistent with the planned expansion to a 600-ship force ultimately centered around 15 deployable carrier battle groups, we will add a 13th wing in FY 1984 and a 14th during FY 1987. We will maintain three active Marine Corps air wings, two Navy reserve wings, and one Marine reserve wing throughout the program period.

2. FY 1985-89 Programs

Our five-year program was formulated with an awareness of the finite resources available and the need to allocate those resources among the most urgent priorities. The program pursues, in general order of priority, improvements in four broad areas: readiness and sustainability; modernization; electronic warfare; and target acquisition, surveillance, and warning.

a. Combat Readiness and Sustainability

Improving combat readiness and sustainability continues to be one of our highest priorities. The following paragraphs highlight the efforts we are making to improve the combat capability of our forces. Logistics initiatives are covered in detail in the Materiel Readiness and Sustainability chapter.

(1) Combat Readiness

Combat readiness is determined by the amount and type of equipment and supplies on hand, as well as by personnel and training levels. During the previous decade, the combat readiness of our tactical air forces fell below desired levels. This Administration, therefore, has given top priority to improving the readiness of the forces and the equipment they operate. We have made significant progress to date, building up stocks of spare parts for our aircraft and providing more -- and more realistic -- training for our air crews. The FY 1985-89 program continues those trends.

(a) Equipment and Supplies

Peacetime operating spare parts are critical to the readiness of our forces. These items keep our equipment ready for training in peacetime and support increased levels of activity during the initial stages of a conflict. We have substantially increased funding for the procurement of spare parts during each of the past three years. Since FY 1982, we have added $20.2 billion for these items.

We are also making more use of civilian personnel at depot-level maintenance facilities. Plans to hire additional maintenance personnel will enhance our ability to respond to wartime surge requirements, while minimizing peacetime support costs.

(b) Personnel and Training

To realize the full potential of our significant investment in tactical aircraft, we must have highly trained air crews. The amount of flying time we provide our crews is a good measure of their training and readiness levels. Largely because of their significant advantage in average flying time per crew member, our tactical air crews continue to be considered superior to Warsaw Pact aviators.

In FY 1985, Air Force tactical aircraft pilots will average about 240 flying hours. This represents an increase of nearly 50% over the FY 1978 low of 156 flying hours, and is nearly double the time logged by Soviet pilots. Navy tactical aircraft pilots will average about 288 flying hours in FY 1985, up from 276 hours in FY 1984. We must sustain these increased levels of training if our air crews are to achieve and maintain their full combat potential.

In addition to increasing flying hours, we are continuing to emphasize realism in training. Experience has shown that air crews with high levels of realistic peacetime training have a significant advantage over less-skilled adversaries in the critical early days of a conflict. Instrumented Air Combat Maneuvering Ranges offer U.S. and allied air crews a unique and realistic training aid.

Joint Service exercises -- in which active and reserve units from the Air Force, Navy, and Marine Corps conduct integrated operations -- also increase the combat proficiency of our tactical air crews. Examples of this type of training include the "Red Flag" exercises held at Nellis Air Force Base, Nevada; the "Cope Thunder" exercises conducted at Clark Air Force Base, the Philippines; and the combined-arms, live-fire exercises held at the Marine Corps Air Station in Yuma, Arizona.

(2) Force Sustainability

The possibility of extended conflict required accelerated improvement in our ability to sustain our forces. As a result, we increased Air Force and Navy funding for war reserve spares and munitions. These efforts have resulted in a 25% increase in the number of days a typical Air Force squadron could sustain combat operations. Similarly, the ability of our naval fighter and attack squadrons to conduct prolonged wartime operations is much improved.

In addition to sustainability, the five-year program gives force projection a high priority. We have provided funds to preposition aircraft support equipment, materiel-handling equipment, and flight-line support vehicles in Europe and Southwest Asia, and to increase storage capacity for munitions and for petroleum, oil, and lubricants (POL) in both regions. The Force Projection and Materiel Readiness chapters discuss these programs in more detail.

b. Force Modernization

Our modernization program for the tactical air forces is structured to meet three goals: to increase combat capability; to reduce the average age of the force; and to permit a modest force expansion.

We are procuring aircraft (F-14s and F-15s) and weapon systems (Phoenix and AMRAAM missiles) with improved capabilities to detect, identify, and engage enemy aircraft at long ranges and in bad weather. Likewise, we are procuring aircraft such as the F-16 and F/A-18 in sufficient numbers to improve air combat performance in unavoidable close-range engagements. Additionally, weapon systems such as LANTIRN are being developed to improve our capabilities to attack ground targets at night and in adverse weather.

An average age of 10 to 11 years is considered acceptable for Air Force tactical aircraft. For Navy and Marine Corps aircraft, we prefer an average age of 8 to 9 years because of the high stress associated with carrier operations. By FY 1989, the aircraft operated by active and reserve Air Force squadrons will have been in service for an average of 9 and 16 years, respectively. The aircraft in operation with active and reserve Navy/Marine Corps squadrons will have seen 9 and 15 years of service, respectively.

Over the next five years, we plan to buy 1,386 fighter and attack aircraft for the Air Force and 881 for the Navy and the Marine Corps. This procurement plan will allow us to modernize our tactical air forces and replace attrition losses, while also achieving our goals of expanding to 14 active carrier air wings by FY 1987 and 40 Air Force tactical fighter wings by FY 1989.

(1) Air Force Programs

In FY 1985, the Air Force is proposing to procure 48 F-15s and 150 F-16s. The F-15 procurement will support the formation of about one and one-half F-15C/D tactical fighter squadrons, freeing earlier-model F-15A/B aircraft for transfer to reserve units. Most of the F-16s will replace F-4Es in the active force, freeing those aircraft for transfer to the ANG, where they will replace early-model F-4Cs and other aging aircraft. The remaining F-16s are being assigned to the reserves. One ANG unit received F-16s in FY 1983, and an Air Force Reserve unit is scheduled to follow in FY 1984. Additional deliveries of F-15 and F-16 aircraft to the reserves are scheduled for FY 1986 and later years.

We would prefer to procure F-15s and F-16s at higher, more efficient rates in FY 1985 to accelerate the modernization of the reserve force, but cannot do so because of the higher priority given to other defense activities. The later years of the five-year program, however, will permit us to procure fighter aircraft at more efficient rates.

Though our F-15 and F-16 aircraft could perform satisfactorily in air-to-air combat against Soviet aircraft today, we must pursue a vigorous modernization program if we are to preserve our advantage in the latter half of the decade, when the Soviets are expected to deploy a new generation of fighter aircraft with improved air-to-air combat capabilities. Therefore, the FY 1985-89 program funds several ongoing weapons development programs, including the Advanced Medium-Range Air-to-Air Missile (AMRAAM), which will give the F-16 a night/all-weather, radar-missile capability, while significantly improving the F-15's capabilities in aerial engagements beyond visual range. For the future, we are continuing studies of Advanced Tactical Fighter (ATF) concepts that could lead to the introduction of a new aircraft type in the mid-1990s.

The FY 1985 program continues funding for a new air-to-ground variant of the F-15 or F-16, commonly known as the "dual-role fighter." This aircraft will significantly improve the range/payload capability of our tactical forces and, in conjunction with LANTIRN, their ability to operate at night and in adverse weather. We have completed an operational comparison of F-15 and F-16 derivatives and, in early 1984, expect to select an aircraft for development.

Further details on major elements of the Air Force's modernization program are provided below:

F-15 (Eagle) -- The F-15 is the Air Force's air-superiority fighter. Equipped with beyond-visual-range radar missiles, it can engage aircraft deep in enemy airspace from standoff positions in all types of weather. We plan to acquire 372 additional F-15s through FY 1989, and to continue buying these aircraft into the mid-1990s.

F-16 (Fighting Falcon) -- A multirole fighter, the F-16 is capable of performing in both the air-to-air combat and air-to-ground attack roles. It complements the F-15 as an air superiority fighter. We plan to procure 150 F-16s in FY 1985, then increase the production rate to 216 aircraft per year in FY 1986 and beyond. We also are developing a cranked-arrow-wing version that will greatly expand the aircraft's range and payload.

MC-130H (Combat Talon II) -- A modified C-130 aircraft operated by the Special Operations Forces, the MC-130H is equipped with precision-navigation, terrain-following, and self-protection systems that enable it to penetrate enemy airspace at night and at low altitudes. Its primary mission is to drop combat personnel and equipment behind enemy lines. By FY 1991, the inventory will include 35 of these aircraft.

HH-60D/E (Nighthawk) -- With its extended range and improved avionics, the "D" model of this helicopter will be capable of precision low-level navigation at night and in adverse weather. This version will replace aging helicopters in the special operations forces and a portion of the helicopters in the combat rescue fleet. We plan to modernize the remainder of the combat rescue fleet with the less costly HH-60E. This model, with less sophisticated avionics, will improve our combat rescue capability in favorable weather conditions.

LANTIRN -- Currently under development, the LANTIRN is a pod-mounted navigation and targeting system designed to acquire enemy targets in day or night and to relay targeting information to air-launched weapons. Soviet army doctrine stresses around-the-clock operations in all types of weather. Therefore, we must be capable of destroying enemy concentrations whenever they present themselves, and not allow darkness or the poor weather conditions prevalent in Central Europe to become their ally. With LANTIRN, the F-16 and A-10 will be able to navigate and deliver weapons at night and in adverse weather.

IIR Maverick -- An antiarmor, air-to-surface missile, the IIR Maverick is an updated version of the current TV-guided system. The IIR version uses an imaging infrared seeker for guidance, expanding its capability in the night-attack role. Teamed with LANTIRN, it will provide a potent addition to our future antiarmor capabilities. The system will be fielded beginning in FY 1984.

Advanced Medium-Range Air-to-Air Missile (AMRAAM) -- The AMRAAM is a new, all-weather, air-to-air missile being developed for use by both the Air Force and the Navy. Unlike current radar missiles, which are guided to their targets by the radar systems aboard the aircraft that launch them, AMRAAM will have an active radar seeker, giving it a "launch-and-leave" capability. This means that the missile will be able to guide itself to its target, and that an aircraft carrying several of these missiles will be able to engage multiple targets on a single intercept, thus reducing its exposure to enemy air defenses.

AIM-9M (Sidewinder) -- An infrared-guided, air-to-air missile carried by both Air Force and Navy aircraft, the AIM-9M incorporates improved background-discrimination and countermeasures capabilities relative to earlier versions. Other improvements include a reduced-smoke motor, making it more difficult for an enemy both to see the missile and to "track back" to our aircraft's location. We are modifying all of the Air Force's F-4D/E aircraft to carry the highly effective AIM-9L/M missiles.

Wide-Area Antiarmor Munitions (WAAM) -- The Soviets' numerical superiority in tanks and other armored vehicles poses a serious threat to U.S. and allied ground forces in Europe. The WAAM concept focuses on neutralizing this threat through simultaneous dispersal of numerous submunitions, each capable of seeking out and destroying armored vehicles. We are continuing development of advanced antiarmor munitions and delivery systems.

Tactical Aircraft Modifications -- We modify our aircraft to enhance their combat capabilities, improve their reliability and maintainability, correct safety defects, and extend their service lives. Major elements of the FY 1985-89 program include: for the A-10, an inertial navigation system; and for the F-4, a low-smoke engine modification and an improved radar warning receiver. Additionally, under the Compass Call program, we are modifying 16 C-130 aircraft to provide them with the capability to jam enemy communications.

Air Base Survivability -- We have begun a major program to increase the survivability of the European air bases from which we would operate aircraft during a crisis. The program includes improvements both to the 20 main operating bases (MOBs) we maintain and to several dozen collocated operating bases (COBs), maintained by the European allies, that we would share with allied forces in a NATO reinforcement. High-priority projects scheduled to begin in FY 1985 include fabrication of revetments, blast walls, and earthworks at a large number of MOBs and COBs.

We also plan to construct additional concrete shelters for U.S. aircraft deploying to the COBs. Accordingly, we will be working closely with our NATO allies over the next few years to establish funding procedures for the shelters. We are requesting a modest level of "prefinancing" ($42 million) in FY 1985 to begin construction at six COBs.[1] Pending the availability of NATO funding, we must take steps to ensure the survivability of our air bases and aircraft in the event of a NATO/Warsaw Pact contingency.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
F-15				
Development:				
$ Millions	115.2	107.6	82.9	34.3
Procurement:				
Quantity	39	36	48	60
$ Millions	1,479.0	1,526.2	2,213.5	2,531.3
F-16				
Development:				
$ Millions	71.9	104.4	83.4	44.8
Procurement:				
Quantity	120	144	150	216
$ Millions	2,244.5	2,551.3	4,145.4	4,654.4
MC-130H				
Procurement:				
Quantity	1	2	2	4
$ Millions	40.5	71.1	101.4	144.2

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[1] The term "prefinancing" refers to the commitment of U.S. funds for NATO-related projects in advance of the allocation of Infrastructure funding.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
HH-60D/E				
Development:				
$ Millions	27.2	36.2	81.3	29.0
Procurement:				
Quantity	--	--	--	3
$ Millions	--	--	22.5	183.0
LANTIRN				
Development:				
$ Millions	99.9	58.1	98.3	43.6
Procurement:				
Quantity	--	--	4	34
$ Millions	--	--	190.3	441.9
IIR Maverick				
Procurement:				
Quantity	900	1,980	4,690	8,200
$ Millions	248.9	303.1	608.2	746.4
AMRAAM				
Development: a/				
$ Millions	211.7	193.4	253.4	133.4
Procurement:				
Quantity	--	--	174	1,042
$ Millions	--	57.9	431.0	842.9
AIM-9M				
Procurement: a/				
Quantity	2,420	2,050	1,000	1,220
$ Millions	141.2	135.6	71.2	92.6
WAAM				
Development:				
$ Millions	13.7	23.5	27.3	12.6
Tactical Aircraft Modifications				
Procurement:				
$ Millions	687.0	624.7	776.7	1,029.9
Air Base Survivability				
Procurement:				
$ Millions	--	6.4	41.7	18.0

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a/ Includes Air Force and Navy funding.

(2) Navy and Marine Corps Programs

Over the next five years, we plan to buy 381 Navy and Marine Corps fighter and attack aircraft and some 60 combat support aircraft.

The 546 F/A-18s planned during the program period represent more than 50% of the tactical aircraft funded by the Navy. The F/A-18 was introduced into active Navy and Marine units in FY 1983. By the early 1990s, 28 Navy and 12 Marine squadrons will fly F/A-18s. The versatility of this strike-fighter will provide tactical planners an extra dimension in responding to a wide variety of threats.

The procurement plan also supports our objective of providing two F-14 fighter squadrons for each large-deck carrier. The F-14 is our primary fleet air defense aircraft; armed with long-range, air-to-air Phoenix missiles, it enhances the ability of our carrier battle groups to operate in high-threat areas. Carrying the Tactical Air Reconnaissance Pod System (TARPS), the F-14 also provides our carrier task forces with an organic reconnaissance capability. To ensure its continued effectiveness against new-generation Soviet aircraft, we are proposing to begin procuring an upgraded model, the F-14D, in FY 1988. The F-14D will incorporate significant improvements in avionics and radar, enhancing its ability to detect and destroy enemy aircraft. It will also be fitted with a more powerful engine, improving its combat performance.

By the early 1990s, our A-6E attack aircraft will be nearing the end of their service lives and need to be replaced. We are therefore evaluating the relative merits of an upgraded version of the aircraft with improved avionics, radar, and engines, against the possibility of developing an entirely new all-weather attack aircraft. While we are requesting funds for six A-6Es in FY 1985, further procurement will be deferred pending a decision on a possible follow-on aircraft.

We are procuring the new AV-8B vertical takeoff and landing (V/STOL) aircraft for Marine Corps light attack squadrons. The AV-8B will replace older AV-8A/Cs and A-4Ms, freeing the A-4Ms for transfer to reserve units.

Further details on major elements of the Navy's modernization program are provided below:

F-14 (Tomcat) -- The F-14 is an all-weather aircraft designed for fleet air defense. The only aircraft in the Navy's inventory that can carry the long-range Phoenix air-to-air missile, it is intended primarily to protect carrier battle groups against long-range Soviet bomber and cruise missile attacks.

F/A-18 (Hornet) -- The newest addition to the Navy's inventory, the F/A-18 is a multipurpose aircraft capable of employment in both the fighter and the attack role. It is being used to replace older F-4s in Navy and Marine units, and A-7s in Navy units, thereby modernizing a major portion of the fighter-attack force while significantly increasing the fleet's air-superiority capability. The recent addition of forward-looking infrared sensors and laser spot trackers give it a limited ability to attack targets at night and in adverse weather. In the future, we anticipate using F/A-18s for tactical reconnaissance missions. Eventually, the aircraft will be used to modernize reserve squadrons in the Navy and the Marine Corps.

A-6E (Intruder) -- The A-6E is the only carrier-based aircraft that can attack land and sea targets at night and in all types of weather. It is operated by active Navy and Marine Corps units.

AV-8B (Harrier) -- A V/STOL attack aircraft, the AV-8B incorporates improvements over the earlier "A" model in payload, performance, and ordnance delivery accuracy. It is being procured to replace AV-8A/Cs and A-4Ms in Marine Corps units.

AIM-7M (Sparrow) -- The AIM-7M is an all-weather, air-to-air missile designed for use with both Air Force and Navy aircraft. It relies on semi-active radar guidance to home in on its target. First procured in FY 1980, the "M" model has greater electronic countermeasures resistance and look-down/shoot-down capabilities than the earlier "F" version. The Navy plans to continue procurement of the AIM-7M to meet its air-to-air missile requirements until the AMRAAM enters production.

Laser Maverick -- This highly accurate air-to-surface missile is designed to destroy enemy armor and heavy fortifications from standoff ranges. Its sophisticated laser guidance system makes it particularly suitable for use in the close air support role. The missile is compatible with all Navy and Marine Corps attack aircraft.

AIM-54A/C (Phoenix) -- An all-weather, air-to-air missile, the AIM-54A/C is intended primarily for long-range attacks against bombers. First procured in FY 1980, the "C" model has improved electronic counter-countermeasures features relative to earlier versions.

Tactical Aircraft Modifications -- We modify our aircraft to enhance their combat capability, improve their reliability and maintainability, correct safety defects, and extend their service lives. Major elements of the FY 1985-89 program include: for the A-6, an inertial navigation system, the Target Recognition Attack Multisensor (TRAM), and a major rewing program; for the A-7, a forward-looking infrared (FLIR) sensor; for the EA-6B, improved radar jamming equipment (the ICAP II program); and for the E-2C, an improved radar antenna (the TRAC-A program).

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
F-14				
Development:				
$ Millions	14.7	42.0	294.0	542.6
Procurement:				
Quantity	24	24	24	24
$ Millions	931.2	949.9	976.9	969.1
F/A-18				
Development:				
$ Millions	107.8	16.7	19.8	54.7
Procurement:				
Quantity	84	84	84	102
$ Millions	2,469.6	2,318.4	2,686.0	2,861.7

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
A-6E				
Development:				
$ Millions	4.7	8.5	17.9	12.2
Procurement:				
Quantity	8	6	6	--
$ Millions	218.0	213.4	214.6	98.1
AV-8B				
Development:				
$ Millions	117.8	101.9	70.4	38.5
Procurement:				
Quantity	21	27	32	46
$ Millions	741.5	793.6	822.6	1,013.2
AIM-7M [a]				
Procurement:				
Quantity	1,471	1,379	923	1,313
$ Millions	277.9	275.7	173.6	253.7
Laser Maverick				
Development:				
$ Millions	1.0	1.9	2.0	--
Procurement:				
Quantity	12	263	600	1,500
$ Millions	41.4	36.2	110.7	177.9
AIM-54A/C				
Procurement:				
Quantity	108	265	400	567
$ Millions	243.8	333.2	472.0	508.3
Tactical Aircraft Modifications				
Procurement:				
$ Millions	475.6	511.5	566.7	698.5

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[a] Includes Air Force and Navy funding.

c. Electronic Warfare

The FY 1985-89 program funds a mix of electronic warfare systems designed to degrade hostile air defenses; deny the enemy unrestricted use of his command, control, and communications systems; and protect the security of our own communications.

Most enemy air defense systems emit electromagnetic radiation to locate penetrating aircraft and guide missiles to them. We are developing systems, such as the Precision Location Strike System (PLSS) and the High-Speed Antiradiation Missile (HARM), with improved capabilities to locate, identify, and destroy enemy targets by exploiting the electromagnetic radiation they emit.

We are pursuing the following major programs to improve our capabilities in these areas:

EA-6B (Prowler) -- The carrier-based EA-6B is a sophisticated naval tactical support aircraft designed to degrade enemy defenses by jamming their radars and communications systems. Because of the dynamic nature of electronic warfare, the program funds continued improvements to the EA-6B to counter new generations of enemy radars and weapon systems.

High-Speed Antiradiation Missile (HARM) -- The HARM air-to-surface missile, being developed jointly by the Navy and the Air Force, is designed to suppress or destroy land- and sea-based air defense radars. The system will be fielded beginning in FY 1985.

Precision Location Strike System (PLSS) -- The PLSS is designed to locate and identify enemy air defense emitters and guide weapons to them, in all weather conditions and from standoff ranges. Currently under development by the Air Force, the system is scheduled to become operational in the mid-1980s.

Pave Tiger -- The Pave Tiger is a small, ground-launched, expendable drone aircraft designed to suppress or destroy elements of enemy air defense networks. The Israelis' recent success in employing drone systems against Syrian ground-based air defenses illustrates the excellent potential of these vehicles.

Airborne Self-Protection Jammer (ASPJ) -- This joint Navy/Air Force program will provide many of our modern tactical aircraft with reprogrammable electronic countermeasures designed to cope with the projected electromagnetic threat. Unlike earlier jamming systems, which were carried in external pods, the ASPJ system will be built into most aircraft and so will not detract from their aerodynamic performance.

Antijam, Secure Voice, Data, and Identification Friend or Foe (IFF) Systems -- The Joint Tactical Information Distribution System (JTIDS) is a secure, jam-resistant, digital data and voice system designed for use by all four Services. The United Kingdom also plans to purchase JTIDS equipment for some of its tactical air forces. The system is now deployed on E-3A (AWACS) aircraft and at selected ground sites in the United States and Europe. The remaining portions of the system, which include terminals of various sizes and capabilities, will be fielded throughout the 1980s and into the 1990s.

At the Congress' direction, we have terminated the Seek Talk program and have evaluated several alternative approaches to providing, by the end of the decade, a secure, jam-resistant voice radio for our tactical air forces. The preferred alternative, the Enhanced JTIDS System (EJS), will satisfy our secure, high antijam voice requirements. As a near-term response to the Soviet jamming threat, we are modifying our tactical ultrahigh frequency (UHF) radios with the "Have Quick" system. More than 1,000 aircraft have been equipped with this system over the past year.

The Air Force is also developing a combat identification (IFF) system for use by all the Services and our NATO allies. As suggested above, we are pursuing a program to integrate voice, data, and identification systems into a common, modular design.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
EA-6B				
Development:				
$ Millions	12.7	23.4	44.1	58.3
Procurement:				
Quantity	6	8	6	6
$ Millions	296.0	452.8	379.2	314.5
HARM				
Procurement:				
Quantity	289	722	1,674	2,461
$ Millions	161.7	379.2	656.4	803.2
PLSS				
Development:				
$ Millions	78.7	69.0	83.0	63.3
Procurement:				
$ Millions	1.8	8.8	198.2	146.2
Pave Tiger				
Development:				
$ Millions	14.3	5.6	1.0	3.5
Procurement:				
Quantity	100	400	500	--
$ Millions	24.2	48.2	38.9	--
ASPJ				
Development:				
$ Millions	78.6	84.6	69.7	29.0
Procurement:				
$ Millions	25.2	45.0	270.5	472.3
JTIDS				
Development:				
$ Millions	164.4	168.8	239.0	246.3
Procurement:				
$ Millions	--	--	2.9	21.1

d. Target Acquisition, Surveillance, and Warning

The ability to locate and identify enemy air, naval, and ground forces is critical to effective tactical air operations and, therefore, to the outcome of the battle. We are pursuing the following major programs to improve our capabilities in this area:

E-3A Airborne Warning and Control System (AWACS) -- This Air Force aircraft is equipped with a long-range, look-down radar with substantial resistance to enemy jamming. Capable of detecting both air and ground targets, and of managing multiple fighter and attack sorties, the AWACS provides surveillance, warning, and control capabilities for use in North American air defense, as well as in overseas theaters of operation. It is also a valuable supplement to our naval forces in performing the sea-lane defense mission.

We have decided to complete our procurement of E-3A AWACS aircraft with the 34 aircraft purchased through FY 1984. While the additional aircraft previously planned would have provided valuable surveillance capabilities, we believe that new wide-area sensors -- such as the over-the-horizon (OTH) radars discussed in the Nuclear Forces and Naval Forces chapters -- have a higher priority and greater long-term potential. To keep pace with the evolving threat, we will continue to upgrade our existing E-3A aircraft.

E-2C (Hawkeye) -- This carrier-based aircraft provides airborne early warning and command and control support for air defense and sea control missions.

TR-1 -- A derivative of the high-altitude U-2 reconnaissance aircraft, the TR-1 is equipped with an array of sensors designed to provide our forces with continuous, all-weather surveillance of the battle area.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
E-3A				
Development:				
$ Millions	67.0	63.4	76.6	102.0
Procurement:				
Quantity	2	--	--	--
$ Millions	142.5	76.2	--	--
E-2C				
Development:				
$ Millions	40.5	43.6	39.1	25.6
Procurement:				
Quantity	6	6	6	6
$ Millions	287.6	302.5	341.8	370.2
TR-1				
Procurement:				
Quantity	4	5	3	--
$ Millions	149.1	171.1	199.6	71.8

e. Rapid Deployment Force Programs

The inherent deployment flexibility of modern aircraft makes them a key element of our rapid deployment forces. While virtually all tactical air forces are considered "rapidly deployable," the Air Force and the Marine Corps have identified several units for commitment to the Central Command, oriented toward Southwest Asian (SWA) operations. A mix of fighter, attack, and support aircraft have undergone special training to prepare them for this assignment. Recent Air Force and Marine Corps participation in the Bright Star '83 exercise offered an opportunity for in-theater training, as did deployment of two E-3A surveillance aircraft and eight F-15 fighters from the United States to Sudan during the Chadian crisis in the fall of 1983. That deployment revealed some of the limitations -- such as a lack of aircraft parking aprons, inadequate airport navigation facilities, and poor fuel storage and distribution -- that complex modern aircraft could face when operating from unprepared sites. For example, lack of sufficient parking aprons precluded our dispersing the aircraft, which increased their vulnerability to sabotage. Our SWA construction programs are designed to overcome such limitations by upgrading key facilities to which we have access.

3. Conclusion

Since air power is a decisive factor in conventional warfare, we have taken a number of steps to improve the combat effectiveness of our tactical air forces. To maintain their technological advantages over potential adversaries, we are adding newer, more capable aircraft, munitions, and combat support systems to their inventories. Focusing on combat readiness and sustainability, we are providing our air crews with better training and improved logistics support. Together, the improvement efforts outlined in the preceding sections will build a flexible and balanced force, capable of deploying rapidly to distant regions and of bringing considerable firepower to bear against hostile forces in the air, on the ground, and at sea.

D. FORCE PROJECTION

1. Introduction

a. Strategy and Missions

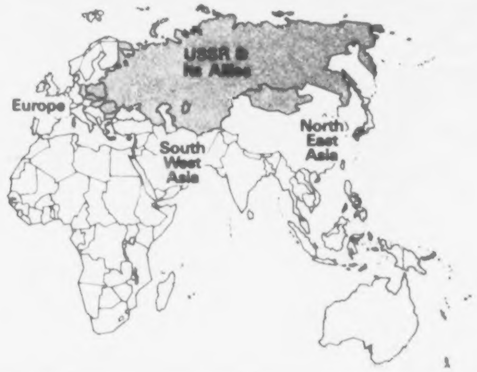
Our strategy of deterrence through forward defense with limited peacetime presence requires a rapid deployment capability. For deterrence to be effective, we must be capable -- and be seen as being capable -- of responding promptly to aggression, with forces of sufficient size and strength to limit the extent of a conflict and protect the security of friends and allies. A credible deterrent, then, hinges to a large extent on our ability to deliver forces rapidly to distant trouble spots and to sustain them once deployed. Projection forces give us that capability.

Deterring Soviet aggression is our biggest challenge. As Chart III.D.1 shows, the Soviets and their allies have a significant advantage of proximity to several critical theaters -- Europe, Southwest Asia, and Northeast Asia -- and they are steadily improving their ability to launch simultaneous attacks in these theaters. In addition, they are enhancing their ability to transport their own or surrogate forces to areas far from both the Soviet Union and the United States.

As a result of these Soviet gains, the demands on our projection forces are greater today than ever before. We must be prepared to dispatch forces promptly to any of a number of regions around the world -- possibly simultaneously. To meet this challenge, we depend on airlift and sealift, complemented by prepositioned materiel (both on land and at sea), and on access to facilities in friendly nations. In designing these programs, we consider the contributions our allies can make with their mobility forces, and the transportation resources potentially available from the civil sector here and abroad.

Chart III.D.1

Soviet Geographic Advantage



b. Contributions of the Various Force Elements

(1) Airlift

Airlift, our most flexible and rapid force-projection resource, would play a vital role in a wide range of deployments. In regions such as Southwest Asia (SWA), where we maintain only a limited military presence in peacetime, airlift would deliver the initial increment of combat forces. These forces -- comprising tactical air, air defense, and light ground units -- would be needed to establish a foothold and secure an area, including ports and airfields, for the arrival of follow-on forces. For deployments to regions such as Western Europe, where we station forces in peacetime, airlift is the only transportation mode that can satisfy our rapid-reinforcement objectives.

Our heavier -- mechanized and armored -- forces cannot be transported rapidly by air in the numbers needed. It is simply too expensive to buy that large an airlift force. Yet we must be able to move such units quickly, particularly in a NATO reinforcement, given the heavily armored forces they would face. We achieve this capability by combining airlift with prepositioning.

(2) Prepositioning

Prepositioning, whether on land or at sea, sharply reduces movement requirements in the important early days of a deployment. For example, by storing heavy items of equipment for our mechanized divisions in warehouses in Europe, we can cut each division's transit time from several weeks to two or three days, thereby enabling us to meet our NATO reinforcement objectives. Though land-based prepositioning programs do much to improve our early combat capability, their contributions are limited to the theaters in which materiel has been stored. Prepositioning at sea offers greater flexibility, since ships can be moved from one region to another as the need arises. Sea-based prepositioning programs, therefore, contribute to our ability to deploy forces rapidly to threatened areas worldwide.

(3) Sealift

Army and Marine Corps units for which we have not prepositioned equipment would, in most cases, deploy by sea. Fast sealift and amphibious ships would be the first to arrive, followed by government-controlled conventional shipping and ships requisitioned from the U.S.-flag fleet. Just as we do with airlift programs, we combine prepositioning with sealift to shorten response times. Supplies and equipment used to unload ships and operate ports can be prepositioned near potential conflict regions, where they would provide a full support capability when our fastest ships arrive.

(4) En Route Basing Support

Access to bases en route to the conflict theater is important for any deployment, particularly a large one. To move a large force quickly, we must maximize the amount of cargo carried aboard each aircraft. Without access to intermediate bases for refueling, we would have to sacrifice cargo space in order to carry more fuel or call upon our limited aerial-refueling forces. Though many of the facilities we have received permission to use are adequate for day-to-day operations, they must often be modified or augmented in peacetime so that they can support military operations during a crisis.

c. Segments of a Deployment

A deployment of any scale would have two segments: the initial movement of combat and support forces to the theater of operation and subsequent movements within the theater.

We use the term "intertheater mobility" to refer to the movement of forces and materiel between major geographic regions or theaters. This portion of a deployment is accomplished by airlift and sealift.

We use the term "intratheater mobility" to denote movements of forces and supplies within a theater of operation. The term applies both to movements from air or sea ports of debarkation to initial destinations and to subsequent movements in response to changing battlefield conditions. Some units would use their own vehicles; others, lacking their own surface or air transportation, must rely on intratheater mobility support.

d. Force Projection Goals

Given the growing ability of the Soviet-bloc nations to launch simultaneous offensives in Europe, SWA, and the Pacific region, our long-term goal is to be able to deploy the forces we need to these areas concurrently.

For a NATO reinforcement, our objective is to be able to move six Army divisions, 60 tactical fighter squadrons, and one Marine Amphibious Brigade (MAB) -- all with initial support -- to their combat positions within 10 days. Our objective for SWA is to be able to deploy a major joint task force and required support within six weeks of being asked for assistance. Our objectives also include deployments to reinforce our units stationed in Northeast Asia.

(1) Europe

Rapid reinforcement is central to the United States commitment to NATO. Our reinforcement objectives for NATO are designed to enable us to augment our forward-deployed forces quickly enough to block Warsaw Pact breakthroughs. Because the reinforcements include six entire Army divisions and their support, we rely on extensive prepositioning to reduce the amount of materiel that has to be moved by air. Under the POMCUS (Prepositioning of Materiel Configured to Unit Sets) program, the Army stores heavy items of equipment (such as trucks, personnel carriers, and tanks) in dehumidified warehouses in Europe. The equipment is arranged in unit sets, ready to be moved out of storage to a marshalling area. Expensive equipment (such as helicopters), sensitive electronic equipment that is difficult to store, and the troops themselves would be airlifted to the marshalling area, where the units would assemble and move forward.

Two other land-based prepositioning programs contribute to our ability to reinforce NATO rapidly in a crisis. The Air Force stores equipment for its fighter and airlift forces at operating bases in several European countries, while the Marine Corps prepositions heavy equipment in Norway for an amphibious brigade.

Once the initial reinforcements had been airlifted to the theater, sealift would accomplish much of the remainder of a deployment. Because government-controlled and U.S.-flag shipping can fulfill only a portion of the requirement, we would also use ships from allied civil fleets. Our dependence on allied shipping would increase if we had to deploy forces simultaneously to two or more theaters.

(2) Southwest Asia

Since we have no forward-deployed forces in SWA, and the main Soviet ground forces would take longer to arrive, our deployment objectives for that region are quite different from those for NATO. Establishing air defenses would have a high priority early in a deployment, as would the protection of ports and preparations to receive aircraft and ships. We rely on airlift, combined with prepositioning, to deliver the forces needed to accomplish these tasks. Heavy combat and support forces would follow on fast sealift, with conventional sealift completing the deployment. Although our objectives are challenging, they can be met with the planned improvements to our projection forces if we have some support from friendly nations in the region and we respond promptly to warning.

Deploying forces to SWA is a challenging assignment. The distances are long -- more than 12,000 nautical miles by sea and 8,000 nautical miles by air -- while the ports and airfields are austere. If we can deploy forces rapidly to SWA, however, we will be able to move comparable forces to almost any area on the globe. Many of the programs directed specifically toward SWA, such as sea-based prepositioning, could be used to support deployments to other areas, if necessary.

e. Current Force Structure

The U.S. military maintains a diverse fleet of aircraft and ships to serve the transportation needs of its forces. The inventory includes 322 long-range cargo aircraft (C-5s, C-141s, and KC-10s) designed primarily to transport materiel to or between theaters of operation. Another 520 aircraft of shorter range (C-130s) and some 700 helicopters (CH-47s, CH-53s, and CH-54s) contribute to the movement of troops and supplies within theaters. In addition, we maintain approximately 76 dry cargo ships and 34 tankers under government control. Some of these ships are used for routine peacetime operations; others could be made available within 10 to 15 days of notification. Approximately 200 additional cargo ships are in long-term storage and could be readied for use within one to three months.

These forces would be augmented in a major deployment by aircraft and ships drawn from our civil fleets. The Civil Reserve Air Fleet (CRAF) could contribute 212 passenger and 108 cargo aircraft -- about 90% of the international passenger aircraft and all of the international cargo aircraft in the U.S. commercial inventory. The U.S.-flag fleet could supply approximately 202 dry cargo ships and 120 tankers. Of these, 160 cargo ships and 25 tankers are available by charter or government contract under the Sealift Readiness Program, which operates at no direct cost to DoD.

f. Assistance from Allies

Our NATO allies and the Republic of Korea (ROK) have agreed to contribute a number of ships and aircraft for reinforcements of their regions. The European allies have earmarked some 600 ships, 37 long-range cargo aircraft, and 22 passenger aircraft for a NATO reinforcement. The ROK has likewise committed a pool of ships and aircraft it would make available to help reinforce that theater. These commitments would speed the reinforcement of these regions, while freeing some of our aircraft and ships for use in other theaters.

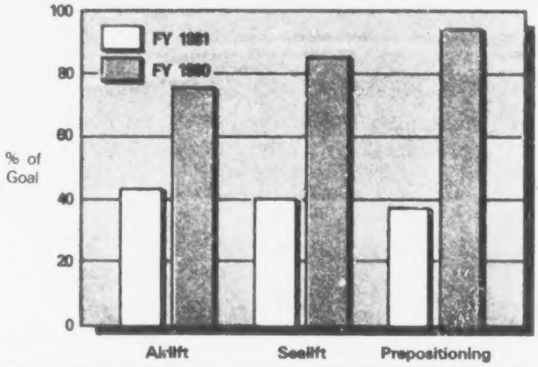
g. Improvements Since FY 1981

While the United States' force-projection capabilities were substantial when this Administration took office, they were insufficient to meet all of the potential deployment demands. We lacked the ability to move large forces quickly enough to deter Soviet aggression in distant regions outside NATO's boundaries. Nor could we deploy major forces to two or more theaters simultaneously. Moreover, we lacked the ability to unload the full range of ships needed to move materiel into less-developed regions. Since 1981, our initiatives to improve our airlift and sealift capabilities, and to preposition additional materiel abroad, have begun to redress these deficiencies.

In January 1982, we announced a major airlift program calling for procurement of 50 C-5B and 44 KC-10 aircraft. In September 1983, we began a long-proposed program to enhance the capabilities of the Civil Reserve Air Fleet (CRAF) by adding cargo-convertible features to existing wide-bodied passenger aircraft in the fleet. Combined with the increased purchases of spare parts we have made over the past three years, these initiatives will, by 1990, increase our intertheater airlift capability by roughly 75%, and more than double our ability to move outsized equipment by air.

For sealift, the FY 1983 budget began an expansion of the Ready Reserve Force (RRF). At the same time, we revised our goal for this force from 44 to 77 ships, including 16 tankers. The FY 1983 budget also began a program to increase the contribution the U.S.-flag fleet could make to the movement of military equipment. The equipment purchased under this program will enable us to modify commercial container ships so that they can carry the full range of military cargo.

Chart III.D.2
Force Projection Improvements



Finally, the FY 1983 and 1984 budgets expanded our land- and sea-based prepositioning programs and accelerated a major sea-based prepositioning program.

Chart III.D.2 summarizes the improvements programmed through FY 1990.

h. Operations in FY 1983

During FY 1983, our projection forces were used to deliver supplies for forward-deployed forces in Europe and Northeast Asia, to deliver the troops and materiel we contributed to the multinational peacekeeping force in Lebanon, and to resupply and assist allies in Africa and Central America. For example, we airlifted more than 600 tons of equipment and supplies, and some 1,400 people, to the Middle East to support peacekeeping efforts in that region. To support our operations in Grenada, some 12,800 troops were moved by air and sea. A landing force of 1,800 marines was deployed by amphibious shipping, while the Military Airlift Command flew more than 1,500 sorties, transporting more than 14,000 tons of supplies and equipment and 11,000 soldiers.

2. FY 1985-89 Programs

The programs we are proposing for the next five years will add substantially to our ability to project forces over long distances to austere regions. They also will move us considerably closer to our goal of being able to deploy major forces and sustain combat operations in two or more theaters simultaneously.

Our planned airlift improvements will help eliminate long-recognized shortages. Our prepositioning programs will enhance our rapid-response capabilities worldwide. Especially noteworthy will be the completion in 1986 of the Maritime Prepositioning Ships (MPS) program, which will give us the capability to deploy a heavily configured Marine division very rapidly to any theater near which these ships are based. Our sealift programs will increase the number of government-controlled ships that can be made available early in a deployment, provide fast sealift for an Army division, and improve our ability to unload all types of ships in austere ports.

a. Airlift Programs

(1) Expansion of Airlift Capacity

Over the next five years, we plan both to add cargo aircraft to our military fleet and to increase the cargo contribution of aircraft in the civil fleet.

The C-5B increases our ability to move outsized equipment, such as helicopters, large weapon systems, and vehicles. These items would have to be dismantled in order to be carried by any other aircraft in military or civilian use. Upon arrival in the combat theater, the items would have to be reassembled -- a time-consuming process that would slow the deployment and introduce risks. This problem would be particularly severe in a NATO reinforcement, given the large amount of outsized cargo that would have to be moved within the first 10 days. Adding to our outsize capability with additional C-5Bs helps resolve this problem.

The KC-10 adds a new dimension of flexibility to our airlift force. It can operate as a transport aircraft or a tanker, or as both simultaneously. Consequently, we can use it in whichever mode best serves the needs of a deployment. In a NATO reinforcement, it would probably be employed as a transport aircraft for moving bulk and oversize cargo. In deployments to other regions, where access to intermediate bases for refueling might be limited, it could be used as a tanker for refueling C-5s and C-141s, or it could operate in a mixed role, carrying fuel for fighters and a limited amount of cargo.

The CRAF contains civilian passenger and cargo aircraft that can be called on to augment military airlift forces during a contingency. Under the CRAF Enhancement program, we are adding cargo-convertible features (e.g., cargo doors and reinforced floors) to passenger aircraft so that they could be converted quickly to carry military equipment in an emergency. In September 1983, we signed a contract to begin this program. Exercising the options available under this contract will allow us to modify 19 passenger airliners, bringing the total available force to 20.

Though the FY 1985-89 program makes significant improvements to our intertheater airlift capabilities, our FY 1989 capability will not meet our long-term goals. Consequently, the FY 1985 budget includes a request for funds to begin full-scale engineering development of the C-17 cargo aircraft. Though smaller than the C-5, the C-17 will be able to carry the full range of military equipment, including all armored vehicles and most other outsize cargo. Unlike most other intertheater aircraft, it will be able to operate into austere airfields, thereby increasing the amount of cargo that can be delivered directly to operating locations. After its intertheater mission is completed, it could be used to augment the C-130 force in moving troops and materiel within the theater.

(2) Improvements to Existing Aircraft

Meeting our airlift objectives requires that we improve our existing airlift forces as well as acquire additional capacity. The FY 1985-89 program sustains several efforts to enhance the effectiveness of our military airlift forces.

(a) Intertheater Airlift

We are continuing a modification program for our C-5A aircraft to correct structural deficiencies in their wings. Once modified, the 77 aircraft now in the fleet will be able to remain in service well into the 21st century. The modification program began in FY 1982 and is scheduled to be completed in FY 1987.

We also are continuing to build up our stocks of spare parts for our C-5A and C-141 aircraft. We must buy adequate amounts of these items in peacetime if our aircraft are to achieve and sustain their planned utilization rates in a crisis.

(b) Intratheater Airlift

Last year, we began a program to modify the wings of older-model C-130 aircraft in order to repair corrosion damage and to correct problems caused by stress. The modifications to the "A" and "D" models will be made during regularly scheduled depot maintenance periods through FY 1986; modifications to the other models were begun in FY 1984 and will be completed in FY 1989. With these modifications, the entire C-130 force will be able to remain in service through the end of the century.

We are also modifying the Army's fleet of CH-47 helicopters to increase their operational capability, and are continuing to procure CH-53 helicopters for the Marine Corps. (These programs are discussed in more detail in the Land Forces chapter.)

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
C-5				
Procurement:				
Quantity	1	4	10	16
$ Millions	798.9	1,367.1	2,189.8	2,568.8
KC-10				
Procurement:				
Quantity	8	8	8	12
$ Millions	891.3	742.0	647.0	507.0
CRAF Enhancement				
Quantity	--	3	4	8
$ Millions	--	95.9	128.9	253.6
C-5 Wing Modification				
Quantity	18	24	--	--
$ Millions	184.6	241.6	--	--
C-17 Cargo Aircraft				
Development:				
$ Millions	60.0	26.6	129.3	364.2

b. Sealift Programs

Sealift is vital for projecting and sustaining the full range of combat and support forces. In a large deployment, it would deliver a majority of the forces and cargo (including much of the nonprepositioned equipment for heavy divisions and support units) as well as most of our ammunition and supplies.

(1) Fast Sealift

In FY 1981-82, we acquired eight SL-7 container ships -- at 33 knots, the fastest cargo ships available. To enable these ships to carry the full range of military cargo, and to improve their loading and unloading time, we are converting them to a self-sustaining, "roll-on/roll-off" configuration. Funds for the first four conversions were provided in FY 1982, and the FY 1984 budget funded the remaining four. All eight ships will be operational by the end of FY 1986.

(2) Ready Reserve Force

As noted earlier, we have begun a program to expand the Ready Reserve Force (a part of the National Defense Reserve Fleet) to 77 ships (61 cargo ships and 16 tankers) by FY 1988. This will require adding 30 cargo ships and 15 tankers to the present inventory. These ships can be made available for sealift operations on five to ten days' notice, without disrupting routine commerce. In peacetime, we would plan to use the ships to meet any surge requirements of the Military Sealift Command. In a major crisis, they would provide some of our earliest-available sealift. We also could use them for smaller contingencies not requiring the entire U.S.-flag fleet.

(3) Container Ship Utilization

In their operations to recapture the Falkland Islands, the British found breakbulk ships to be the most useful vessels for delivering cargo. These ships carry their own cranes and can accommodate the full range of military cargo. With the switch to containerization in the maritime industry, however, breakbulk ships have come into increasingly short supply. Though the greater use of container ships has substantially increased shipping companies' productivity, it has put into commercial service ships with only limited utility for military operations. Most of these ships require modern ports with extensive crane facilities to load and unload cargo. Also, many items of military equipment cannot be containerized to be loaded on them.

The Navy has developed two techniques for giving container ships a breakbulk capability during contingencies. One option is to load cargo on a strengthened version of the commercially available flat rack, a large platform that fits in the standard container guides on these ships. In essence, flat racks function as portable decks that are loaded and unloaded with the cargo they carry. Alternatively, the ships can be fitted with large containers, called sea sheds, that are installed in reinforced container guides, where they provide a cargo hold accessible from the main deck. Sea sheds are strong enough to carry the heaviest items of military equipment. Once fitted, they can remain in a ship indefinitely. Both flat racks and sea sheds increase the military utility of container ships. We plan to buy enough of this equipment to outfit approximately 30 container ships. A fleet of that size could provide lift for about one Army division and its support.

(4) Sealift Discharge

Deployments to SWA could well require unloading cargo, water, and fuel in austere or damaged ports, or in areas lacking port facilities. The Army and Navy are working together to improve their ability to unload ships under these conditions.

Container ships without cranes and roll-on/roll-off ships without ramps typically use cranes and ramps available in the modern ports they serve. These facilities must be transported to austere ports. Our program buys transportable barges to load and unload ships unable to navigate in shallow waters; mobile piers; portable facilities for unloading petroleum, oil, and lubricants (POL) from tankers; portable ramps for roll-on/roll-off ships; and an Auxiliary Crane Ship (TACS) to unload non-self-sustaining container ships. To meet the Army's and Marine Corps' requirements, we plan to buy 11 TACS by FY 1989. The lead ship was funded in FY 1982.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
SL-7 Conversions				
Procurement:				
Quantity	--	4	--	--
$ Millions	44.0	227.0	2.2	9.7
Ready Reserve Force				
Procurement:				
Quantity	--	9	9	10
$ Millions	--	31.0	31.0	31.0
Flat Racks and Sea Sheds				
Procurement:				
$ Millions	10.2	17.3	18.5	56.3
TACS				
Procurement:				
Quantity	--	1	2	3
$ Millions	--	29.8	44.0	71.0
Sealift Discharge				
Procurement:				
$ Millions	5.0	34.0	87.1	136.4

c. Prepositioning Programs

Rapid deployment -- whether to reinforce a developed region, such as Western Europe, or to deploy forces to an austere one, such as SWA -- often depends heavily on prepositioning. We have undertaken several programs to store equipment and supplies in Europe and SWA for U.S.-based forces who would deploy there in time of crisis.

(1) Prepositioning in Europe

(a) Army

Prepositioning of U.S. equipment in Europe began in the 1960s in response to U.S. and European concerns that the forces available in the theater were inadequate to meet the Warsaw Pact threat. Since that time, the Warsaw Pact has increased the effectiveness and mobility of its forces. As a result, the need for rapid deployment of heavy, mobile forces is at least as great today as it was when the prepositioning program was first proposed.

Under the POMCUS program, we have stored heavy equipment for four Army divisions and supporting units in Europe, and have promised our NATO allies that we will provide equipment for two more divisions, for a total of six. Belgium has provided land for the fifth set; the Netherlands, for the sixth. Infrastructure funds have been allocated to cover the costs of constructing the sites. Work began last year, and the first warehouses will receive equipment during FY 1984. We expect the remaining warehouses to be ready by the end of FY 1985, and with continued congressional support, we plan to move equipment into them as they become available.

(b) Air Force

The Air Force prepositions equipment in Europe to speed the delivery of tactical fighter squadrons and the minimum support they need to begin fighting. The materiel in storage includes engineering equipment for repairing damaged runways, as well as ground support and medical equipment. To sustain forward-deployed forces until further reinforcements can arrive, munitions, spare parts, POL, and other consumable items have also been prepositioned.

(c) Marine Corps

The Marine Corps is continuing a land-based prepositioning program in Norway, where it is storing equipment for an amphibious brigade. This materiel will be in place by the end of FY 1986.

(2) Southwest Asia Prepositioning

Our prepositioning efforts in SWA serve three main objectives: they permit forces to be deployed rapidly to the region; they provide the materiel needed to unload ships in austere ports; and they provide supplies and ammunition to cover expected consumption until sealift can meet demands. We are making extensive use of sea-based prepositioning in the region because we lack land-based sites and because it provides flexibility to meet the variety of contingencies we might encounter in SWA or elsewhere.

Our program to preposition supplies aboard ships dates from July 1980, when the Near-Term Prepositioning Force (NTPF) was created. That force originally comprised seven ships, stationed at Diego Garcia, an island base in the Indian Ocean. Six of the ships carried equipment and supplies for a Marine Amphibious Brigade; the seventh carried fuel for the Marines and other early arriving forces. Eleven depot ships were added to the force during 1981 and 1982 to increase the amount of ammunition, supplies, POL, and medical equipment available to early arriving Air Force and Army units.

Ultimately, we plan to preposition unit equipment and supplies for three Marine Amphibious Brigades. Under the Maritime Prepositioning Ship (MPS) program, we are chartering 13 self-sustaining, roll-on/roll-off ships for this purpose. In time of crisis, the troops and their remaining materiel would be airlifted to the theater, where they would draw their equipment and supplies from the ships.

We plan for the first MPS task force to be on station in late 1984 and the second and third in 1985 and 1986, respectively. The task forces to be formed in 1984 and 1985 will be stationed outside the SWA region. The task force scheduled for deployment in 1986 will be based at Diego Garcia, where it will replace the six ships from the NTPF that carry Marine equipment.

d. Access to Foreign Facilities

We have reached formal agreement with several nations, and are seeking permission from others, to preposition materiel, to use regional facilities during crises, and to conduct routine training exercises during peacetime. In some cases, it has been necessary to improve existing facilities. Construction at these sites was initially funded in FY 1980-81, and most of the programs are scheduled to be completed by the end of FY 1987.

By agreement with the United Kingdom, we are upgrading facilities at Diego Garcia so as to increase the capacity of its airfield to support en route refueling and to prepare for mooring additional MPS and ammunition ships. We are also upgrading facilities at Lajes Air Base in the Azores, and are seeking agreement with Portugal to increase the fuel-storage capacity there. These programs enhance our ability to deploy forces rapidly in a crisis as well as to support peacetime operations.

e. Command, Control, and Communications (C^3) Support

We plan to procure new communications equipment for commercial ships to use in wartime. This equipment will eliminate the 12- to 36-hour delays inherent in the current system as well as provide secure communications channels over which we can advise cargo ships of the location of enemy forces. At the same time, we are upgrading the high frequency (HF) radios aboard our intertheater military aircraft in order to increase their reliability.

We are also developing several automated planning and C^3 systems, including the Joint Deployment System. These systems will contain master data files and computer models to be used in formulating contingency plans; they also will provide up to the minute information to commanders making deployment decisions in a crisis.

3. Conclusion

The growing reach of Soviet military power, coupled with the proximity of the Soviets and their allies to several regions of critical importance to us, poses enormous challenges for our projection forces. We have recognized the serious shortfalls in our capability to deploy forces, and have begun a series of programs to correct them.

Building on our progress to date, the FY 1985-89 program will bring even larger gains in capability. The procurement of additional C-5 and KC-10 aircraft, and new C-17 aircraft, along with CRAF Enhancement, will add to the capability and flexibility of our airlift forces. Completion of the Maritime Prepositioning Ships program will enable us to deploy a division-sized Marine force very rapidly to distant conflict theaters worldwide. And the expansion of the Ready Reserve Force, coupled with continued purchases of equipment to unload ships in austere ports, will enhance our ability to deliver combat forces and materiel by sea.

The programs we have planned for the next five years will move us considerably closer to our goal of deploying combat-ready forces to distant theaters simultaneously. While further improvements will be necessary, these programs will enhance significantly the rapid deployability of our forces and, consequently, their deterrent strength.

E. NUCLEAR FORCES

1. Introduction

U.S. nuclear forces include strategic offensive forces, strategic defensive forces, nonstrategic nuclear forces, and the command, control, and communications systems that support those forces.

Strategic offensive forces include land-based intercontinental ballistic missiles (ICBMs); submarine-launched ballistic missiles (SLBMs); and long-range bombers armed with gravity bombs, short-range attack missiles (SRAMs), and air-launched cruise missiles (ALCMs). Maintaining three diverse types of forces -- collectively referred to as the strategic nuclear triad -- strengthens the capability and deterrent value of the force by compounding the problems of a potential attacker and by compensating for vulnerabilities in any one of the triad components.

Strategic defensive forces include air defense forces and ground- and space-based surveillance systems. Air defense forces control access to North American airspace, warn of bomber attacks, and provide a limited air defense during war. Surveillance systems warn of ICBM and SLBM attacks and monitor and track objects in space. These systems contribute to deterrence by ensuring we would receive timely warning of an attack, thus reducing Soviet confidence that they could successfully carry out a surprise attack.

Strategic command, control, and communications (C^3) systems help assess attacks, support command functions, and provide communications linking our warning sensors, command centers, and forces. Effective deterrence demands that these systems be able to function both during and after an attack.

Nonstrategic nuclear forces include intermediate-range nuclear forces (INF), such as intermediate-range missiles and tactical bombers carrying nuclear weapons; short-range nuclear forces (SNF), such as artillery projectiles and surface-to-surface missiles; land-based defensive systems, such as surface-to-air missiles and atomic demolition munitions; and sea-based systems. These systems enhance deterrence by providing the capability to respond at the lower end of the nuclear spectrum, firmly linking our strategic forces to our conventional capabilities.

Since October 1981, the President has vigorously pursued a plan for maintaining deterrence by modernizing aging nuclear forces while negotiating arms reductions with the Soviet Union. Our modernization efforts are linked firmly to our arms control objectives. The prospect of more modern and capable U.S. forces provides the Soviets with incentives to negotiate genuine reductions. Also, the deep cuts we seek in the destructive potential of ballistic missiles should improve the survivability of our future ICBM force. Modernization and reductions are directly linked through the nuclear weapons "build down" proposed by the President in the START negotiations.

2. FY 1985-89 Programs for Strategic Forces

The FY 1985-89 program sustains the modernization plan begun in 1981, adds a vigorous development program for a small land-based missile, and begins a long-term research and development program to counter ballistic missiles with defensive measures.

a. Strategic Offensive Forces

(1) The ICBM Force

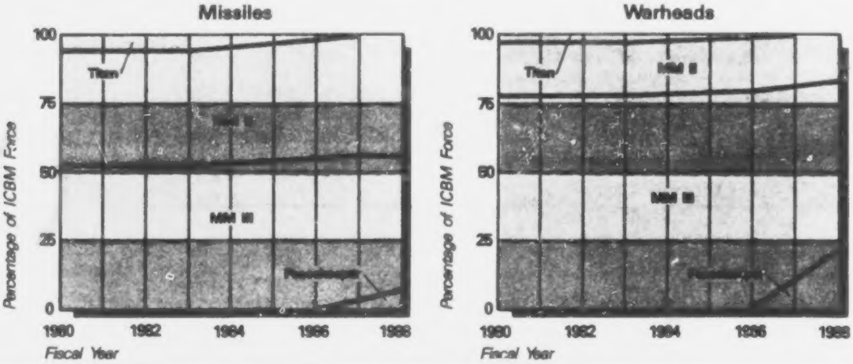
High alert rates and excellent supporting communications systems make ICBMs the most responsive element of the triad. The ICBM's ability to put hardened Soviet targets at risk is essential to effective deterrence. We face growing asymmetries, however, with respect to our capability against hardened targets: the unfavorable balance between our capability and that of the Soviets, and the disparity between our capability and our military requirements.

The Peacekeeper ICBM is essential to redress these asymmetries as soon as possible and to encourage the Soviet Union to negotiate arms reductions. The Peacekeeper will be more accurate than our existing Minuteman missiles, will carry more warheads, and will be capable of holding hardened Soviet targets at risk. Development of the missile is well under way. Flight testing began in 1983; deployment in Minuteman silos, in line with the recommendations of the Scowcroft Commission, will begin in late 1986. By 1990, all of the planned force of 100 Peacekeeper missiles will be deployed. The FY 1985 budget request includes funds for continued research and development, production of the missile, and modifications to the Minuteman silos that will hold the new missiles.

Research on the new small ICBM recommended by the Scowcroft Commission is under way, with full-scale development scheduled to begin in FY 1987. The missile will weigh approximately 30,000 pounds, ensuring its compatibility with a mobile basing system. We are considering several competitive design concepts both for the missile itself and for the basing vehicles and structures. At the same time, we are looking at requirements for the system as a whole, including its concept of operations, C^3 support requirements, and its potential impact on the environment. The FY 1985 budget request includes research and development funds for the missile and hardened mobile launcher and for follow-on basing concepts, including advanced silo-hardening technology.

ICBM modernization, and the importance of maintaining the Minuteman force, are illustrated in Chart III.E.1. The FY 1985 program provides needed refurbishment for Minuteman, including the replacement of aging missile components and test equipment. At the same time, we are retiring our obsolete force of Titan II missiles. The deactivations are scheduled to be completed in 1987.

Chart III.E.1
ICBM Force Modernization



	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Peacekeeper Missile and Basing				
Development:				
$ Millions	2,407.2	1,984.9	1,716.3	852.3
Construction: a/				
$ Millions	16.7	31.2	114.0	77.9
Procurement:				
Quantity	--	21	40	48
$ Millions	--	2,157.4	3,171.9	2,833.0
Small ICBM and Mobile Launcher				
Development:				
$ Millions	--	345.4	465.2	482.0
Follow-on Basing Technology				
Development:				
$ Millions	--	121.9	259.3	161.7
Minuteman Modernization				
Development:				
$ Millions	7.2	4.9	4.7	32.9
Procurement:				
$ Millions	82.7	106.6	121.4	129.4

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a/ Excludes planning and design, and family housing.

(2) Sea-Based Strategic Nuclear Forces

Ballistic missile submarines (SSBNs), when at sea, are the most survivable element of the strategic triad. The SSBN modernization program calls for replacing the aging fleet of Poseidon submarines with more capable and survivable Tridents, and for achieving a sea-based capability to destroy hard targets by developing and deploying the Trident II (D-5) missile. The program will ensure the continued effectiveness of our sea-based forces into the next century.

Today, the bulk of the sea-based deterrent is provided by Poseidon (C-3) and Trident I (C-4) missiles deployed on Poseidon submarines (see Chart III.E.2). Replacing Poseidon missiles with the longer-range Trident I increases the Poseidon submarines' operating area and, therefore, their survivability. These submarines will reach the end of their useful service lives in the mid- to late 1990s.

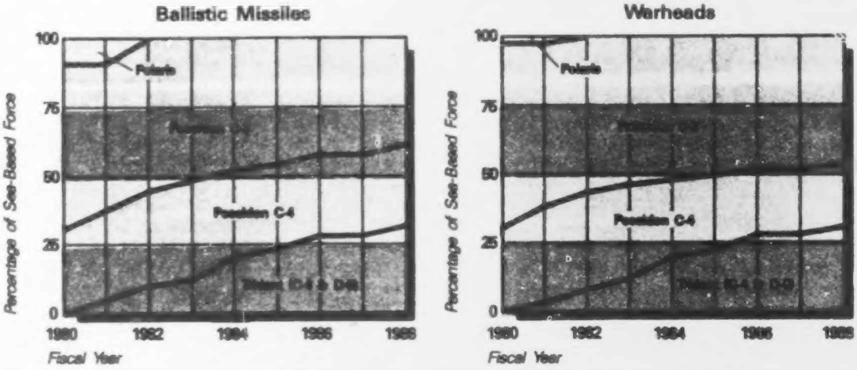


Chart III.E.2
Sea-Based Force Modernization

Trident submarines are more capable and more survivable than the Poseidons they are replacing. They carry 24 missiles instead of 16, and their missile tubes will be able to accommodate the larger, more effective Trident II (D-5) missile. Tridents also are faster, quieter, and harder to detect than Poseidons, have improved sonar and self-defense systems, and can spend a greater portion of their time at sea. Eleven Trident submarines have been authorized through FY 1984, and we are requesting authorization of the twelfth in FY 1985. The first three Tridents are already at sea; their performance during sea trials has met or exceeded design specifications.

The first eight Tridents will be equipped with the Trident I missile. The Trident II will be deployed on all new Trident SSBNs starting with the ninth, and will be retrofitted into the first eight. The Trident II can carry larger payloads and is more accurate than the

Trident I, thus providing the SSBN force with the capability to put hard targets at risk. The new missile is now in full-scale development, with initial deployment scheduled for 1989. The FY 1985 budget request includes the first increment of funding for Trident II missile production, as well as long-lead funding for navigation, guidance, and reentry systems.

For the near term, we plan to deploy sea-launched cruise missiles (SLCMs) with nuclear warheads on attack submarines and surface ships. Nuclear SLCMs will be effective against a wide range of enemy targets. Putting them on attack submarines and surface ships will be a cost-effective way of increasing our hard-target capability at sea, and will improve the overall survivability of the force by distributing missiles among a larger number of platforms.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Trident Submarine				
Procurement:				
Quantity	1	1	1	1
$ Millions	1,757.4	2,137.8	1,793.9	1,862.6
Trident I Missile				
Procurement:				
Quantity	62	52	--	--
$ Millions	633.7	549.9	163.8	109.2
Trident II Missile				
Development:				
$ Millions	369.6	1,473.2	2,091.1	2,250.5
Procurement:				
Quantity	--	--	--	--
$ Millions	--	--	162.9	758.0

(3) The Strategic Bomber Force

Modernization of the bomber force will dramatically improve the strategic balance in this decade. Bombers are survivable, and they can attack the full range of strategic nuclear targets. In addition to their nuclear capabilities, long-range bombers can be used to support general-purpose force operations. They can deliver large conventional payloads to targets virtually anywhere in the world, thereby significantly increasing the firepower available to theater commanders. They also are useful in naval support roles, such as laying mines and attacking surface ships.

Today's force of B-52 and FB-111 bombers provides a credible deterrent. Toward the end of the decade, however, as the Soviets' air defense system becomes more formidable, B-52s will find it increasingly difficult to survive as penetrating bombers. We therefore plan to deploy the B-1B beginning in 1985 and to continue modifying B-52s to carry cruise missiles. By the end of the decade, the B-1B will be our primary penetrating bomber; most B-52s will serve as cruise missile carriers. Those B-52s not modified to carry cruise missiles will take on general-purpose missions. The Advanced Technology Bomber (ATB), to be deployed in the early 1990s, will ensure that our bombers will be able to penetrate Soviet air defenses into the 21st century.

(a) Bomber Modernization

The B-1 is making excellent progress. The flight-test program began ahead of schedule, and the first production aircraft should begin flying several months earlier than originally planned. The 1985 budget request includes funds to procure 34 aircraft, continue flight tests of the B-1A, and begin flight tests of the B-1B.

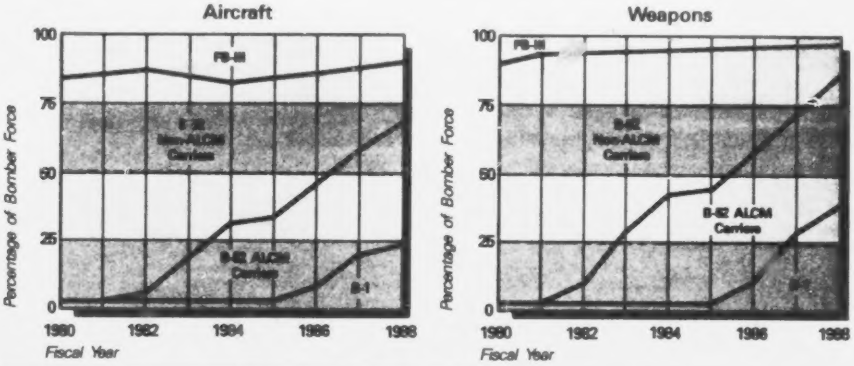
A major element in the bomber modernization program is the deployment of air-launched cruise missiles (ALCMs), first on B-52s and later on the B-1B. ALCMs are small, low-flying, highly accurate missiles that are very effective against hard targets and pose difficult problems for Soviet air defenses. By the end of FY 1984, we will have deployed ALCMs on 90 operational B-52Gs. Starting in 1985, we will begin to modify B-52Hs to carry the missiles.

To counter the projected Soviet air defense threat, we are beginning development of a longer-range advanced cruise missile (ACM) that will incorporate low-observable technology. B-52s equipped with ACMs will be able to stand off farther from Soviet defenses and still put distant targets at risk. Once they are launched, the missiles themselves will be less vulnerable: their longer range will allow them to circumnavigate enemy defenses, while their low-observable design will enhance their ability to penetrate highly defended areas.

(b) Current Bomber Force

Within the framework of the modernization program, we are planning carefully for the most effective use of existing aircraft. B-52G and B-52H aircraft will only be modified consistent with their intended missions and projected operational lives. Planned modifications include a new offensive avionics system, improved electronics countermeasures equipment, engine refurbishments, and autopilot upgrades. Chart III.E.3 shows the proportion of bombers and bomber weapons of each type in the force from FY 1980 to FY 1988.

Chart III.E.3
Bomber Force Modernization



(c) Aerial Tankers

Aerial refueling is essential to virtually all bomber missions -- strategic and conventional. It allows bombers to reach more distant targets, cover greater distances at lower altitudes, and fly around enemy air defenses. Tanker forces provide refueling support for tactical fighters as well as bombers; they also can serve as transport aircraft. To meet these varied demands, which could occur simultaneously, we plan to expand our aerial refueling capability by reengining existing KC-135As and purchasing new KC-10 cargo/tanker aircraft.

Reengining KC-135s with current-technology CFM-56 engines -- the KC-135R program -- will increase the fleet's refueling capability by approximately 50%, reduce operating and maintenance costs, and ensure the fleet's continued effectiveness well into the next century. The FY 1985 budget request includes funds to procure support equipment and engines to modify 53 aircraft.

Since the KC-10 is being purchased primarily to enhance airlift capabilities, it is discussed in the Force Projection chapter.

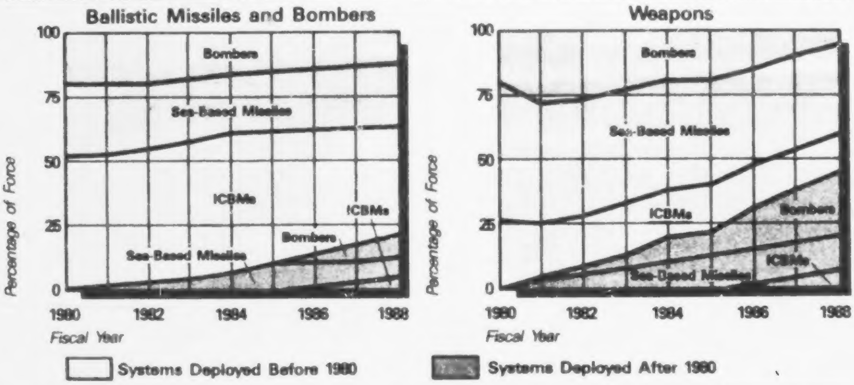
	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
B-52 Bomber				
Development:				
$ Millions	91.0	76.1	22.2	8.1
Procurement:				
$ Millions	518.0	447.7	574.2	452.6

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
B-1 Bomber				
Developmeht:				
$ Millions	753.5	737.2	508.3	375.2
Procurement:				
Quantity	7	10	34	48
$ Millions	4,033.5	6,124.5	7,712.3	5,591.9
Air-Launched Cruise Missile				
Development:				
$ Millions	166.9	38.2	28.0	26.6
Procurement:				
Quantity	330	240	--	--
$ Millions	502.4	422.2	80.5	73.5
KC-135 Reengining				
Procurement:				
Quantity	19	29	50	65
$ Millions	463.4	543.0	982.3	1,303.7

(4) Force Structure Modernization

Chart III.E.4 shows the actual and projected modernization of strategic forces during the 1980s. Notice that, by 1988, modernized systems will constitute about 15% of our operational ballistic missiles and bombers and more than 40% of our weapons.

Chart III.E.4
Strategic Force Modernization



b. Strategic Defensive Forces

Strategic defensive forces and associated C^3 systems are integral components of our deterrent strategy. During the 1970s, funding for strategic defense was often deferred in the face of competing priorities. As a result, our strategic air defense interceptors have become obsolete, and the Soviet Union has operational ballistic missile defense and antisatellite systems, while we have none.

Our strategic defense programs end these years of neglect. The major new initiative this year is a research and development program for advanced defenses against ballistic missiles. We are also improving our network of air defense radars and modernizing our interceptor forces. Finally, we are strengthening our space surveillance capabilities and pursuing an operational antisatellite system.

(1) Strategic Defense Initiative

Last March, President Reagan set as a long-term national goal putting an end to the threat of nuclear ballistic missiles. He directed the Department of Defense to conduct intensive studies of the technologies applicable to ballistic missile defense, and of their implications for deterrence and arms control. The Defensive Technologies Study concluded that emerging technologies held substantial promise and recommended a long-term research and development program to develop sound options that could guide future decisions concerning the development of an effective defense against ballistic missiles.

The Defense Department used the Defensive Technologies Study as the basis for establishing a new program for the President's strategic defense initiative. It represents a major departure from recent ballistic missile defense efforts. Previous programs emphasized point-defense systems that would protect selected military targets by intercepting reentry vehicles in the terminal phase of their flight. The new Strategic Defense Initiative program is designed to examine the feasibility of a system that could engage ballistic missiles and warheads along their entire launch-to-impact trajectories.

While the detailed structure of the new program has not been completed, its general outline is clear. We are focusing previously planned research and development dollars totaling nearly $1.74 billion (88% DoD, 12% DoE) in FY 1985, on five technology areas that offer the greatest promise for defense against ballistic missiles. The FY 1985 request also includes an additional funding increment of about $0.25 billion to augment these and exploit other new technological opportunities.

Although numerous complex technical problems must be overcome, our preliminary studies conclude that an effective defense against ballistic missiles is potentially feasible. Major research and development efforts will be required in directed-energy weapons, conventional weapons, and surveillance and target acquisition systems.

An essential element of the program is the early demonstration of key technologies needed for an effective ballistic missile defense. The knowledge gained from these demonstrations will support decisions in the early 1990s on whether to proceed with development of ballistic missile defenses and which systems appear most promising. Since the program is a research and technology effort, it can be fully pursued for the next several years within existing treaty constraints.

Since the studies also stressed the importance of strong central management, the program will have a single manager reporting directly to the Secretary of Defense. The manager will oversee the preparation and execution of the budget, and will have the authority to reprogram resources to more promising technologies, as necessary. He will also serve as the Department's focal point for reporting to the Congress on the program's progress and on actions requiring congressional review. While the initiative will be centrally controlled, the Services and Defense Agencies will participate in the budget formulation process and will have responsibility for executing their portions of the program.

(2) Air Defense

Over the past two decades, as Soviet ballistic missiles became the predominant strategic threat to North America, we reduced our defenses against Soviet strategic bombers. As a result, our surveillance systems would have difficulty detecting bombers penetrating at low altitudes or through gaps in radar coverage. Furthermore, our interceptor forces consist largely of obsolete fighter aircraft with only limited capability to defend against low-flying bombers.

The Soviets are now developing a new bomber and long-range cruise missile. To meet this increased threat and to correct deficiencies in our strategic air defense systems, we are upgrading our early warning radars and modernizing our interceptor forces. In the near term, our highest-priority objective is to provide warning of surprise bomber and cruise missile attacks. In addition, we are replacing aging F-106s with modern fighters that are more capable of controlling access to our airspace in peacetime and could provide a limited defense against Soviet bombers in wartime. Consistent with the President's strategic defense initiative, we are also examining technologies and system alternatives that could, in the long run, lead to more capable strategic air defenses.

(a) Surveillance Systems

Because long-range detection is essential if we are to have timely warning of bomber attacks, we plan to deploy eight 60° sectors of Over-the-Horizon Backscatter (OTH-B) radars for all-altitude surveillance of the eastern, western, and southern approaches to the continental United States. We are requesting funds in FY 1985 to complete procurement of OTH-B radars for the east coast segment of the network and to buy the first of three radars that will be installed on the west coast. We are also requesting funds in FY 1985 to develop and evaluate alternative surveillance systems for detecting cruise missiles.

To improve our ability to detect low-flying bombers and cruise missiles approaching from the north, and to reduce operating costs, we are replacing obsolete Distant Early Warning (DEW) Line radars across northern Alaska and Canada and western Greenland with modern microwave radars. Funds requested in FY 1985 will complete procurement of the long-range radars and continue development of shorter-range, "gap-filler" radars. The FY 1985 budget also requests funds to buy communications systems to link the radar installations with command centers. To achieve further savings, the obsolete CADIN-Pinetree radar network in southern Canada will be phased out.

(b) Interceptor Forces

U.S. and Canadian interceptor forces assigned to the North American Aerospace Defense Command (NORAD) maintain continuous ground alert at sites around the periphery of the 48 contiguous states, in Alaska, and in Canada. Alert aircraft are employed, in response to radar detections, to intercept and visually identify unknown intruders. Supported by AWACS aircraft, these forces could provide a limited defense against bomber attacks. The Air Force, Navy, and Marine Corps would provide additional interceptors in a crisis.

To meet the increasing Soviet bomber and ALCM threat, U.S. active and Air National Guard interceptor squadrons assigned to NORAD are being equipped with newer, more advanced F-15 and F-16 aircraft. These modern fighters will provide a "look-down/shoot-down" capability to detect and engage enemy bombers penetrating at low altitudes. The Canadians are upgrading their air defense forces with the F-18.

(3) Space Defense

The Soviet Union has an operational antisatellite (ASAT) system; the United States does not. This fundamental imbalance provides the major impetus for our efforts to improve our defensive capabilities in space. The centerpiece of our ASAT program is the Air Launched Miniature Vehicle, which is designed to be launched from F-15s. Successful completion of this program will give us a means of destroying Soviet satellites orbiting at low altitudes, thereby enhancing deterrence against Soviet use of ASAT weapons. At the same time, we are continuing to examine the potential basis for negotiating ASAT arms control agreements.

Our ASAT program is now in the test and evaluation phase. We are requesting funds in FY 1985 to begin procuring the system and to make necessary improvements in associated C^3 systems. For the long run, we are assessing (in conjunction with our research supporting the President's strategic defensive initiative), the feasibility of advanced technologies, such as space-based lasers, for ASAT missions.

We are continuing to improve our ability to identify and track space objects and enemy satellites. By the end of FY 1988, we will have completed a worldwide network of five ground-based electro-optical surveillance sensors designed to detect and identify objects in deep space. The system's rapid search, detection, and tracking capabilities will assist us in defending our space-based systems while allowing us rapidly to identify new space weapons and satellites the Soviets might deploy.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Strategic Defense Initiative				
Development:				
$ Millions	--	991.0	1,777.0	3,789.8

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Air Defense				
Development: $ Millions	85.2	121.4	124.0	74.8
Procurement: $ Millions	28.0	182.0	272.4	414.1
Space Defense				
Development: $ Millions	213.3	203.6	143.3	101.7
Procurement: $ Millions	--	19.3	83.0	128.9

c. Strategic Command, Control, and Communications (C^3)

Forces alone are insufficient for deterrence. We must also have strategic command, control, and communications (C^3) systems to ensure that we could employ our nuclear forces effectively. Our C^3 systems must be able to provide our leaders the information they need to assess the size and scope of an attack, determine an appropriate response, and issue initial retaliatory orders. These systems also must be able to ensure that our forces would receive those orders, called emergency action messages (EAMs), and remain responsive to national authority both during and after an attack.

Strategic C^3 systems must be able to operate reliably under the extremely stressful conditions of a nuclear conflict. Unless we take steps to provide for the survivability of essential systems, they could easily be rendered ineffective through the direct or collateral effects of nuclear attacks, or by electronic jamming and other disruptive measures. The FY 1985-89 program will improve our strategic C^3 systems -- sensors, command centers, and communications -- by upgrading and augmenting their capabilities, increasing their mobility, protecting essential equipment against nuclear effects, and providing alternate and redundant methods of communication.

(1) Missile Warning and Attack Assessment Sensors

In the event of a missile attack, the ICBMs and bomber forces, and some strategic C^3 systems would depend for their survival on timely warning information. Likewise, to select an appropriate response and to control escalation, our leaders must have high confidence that our warning systems have accurately assessed the size and scope of an attack. To meet these objectives, we are improving the survivability, performance, and coverage of our satellite and ground-based warning systems.

(a) Satellite Early Warning System

Early warning satellites in geostationary orbit would provide our first warning of a missile attack. These satellites use infrared sensors to detect ICBM and SLBM launches. Replacement satellites, scheduled for deployment in the mid- to late 1980s, will incorporate a number of improvements designed to enhance their performance and survivability (e.g., improvements in the sensors' focal plane and additional hardening).

Warning data from the satellites are transmitted to fixed ground-based processing stations. To reduce our dependence on these vulnerable facilities, we will deploy six mobile ground terminals (MGTs) to receive, process, and disseminate missile-warning data. By the end of FY 1985, we will have procured all six MGTs and begun operational testing and evaluation of the system.

(b) PAVE PAWS

To complement our satellite warning systems, and to provide redundant coverage of Soviet missile launch areas, we maintain two systems of ground-based radars -- the Ballistic Missile Early Warning System (BMEWS), which warns against ICBM attacks, and PAVE PAWS, an SLBM warning system. Although we are improving our BMEWS radars, our major efforts focus on the PAVE PAWS system.

The PAVE PAWS phased-array radars now operating on our eastern and western coasts would confirm satellite warning of an SLBM attack launched from normal Soviet submarine operating areas. To close coverage gaps to the southeast and southwest of our borders, we are deploying two new PAVE PAWS radars -- one in Georgia and the other in Texas. We are requesting funds in FY 1985 to continue construction of these two sites, both of which are scheduled to be activated by 1987. The four PAVE PAWS radars, along with the existing PARCS radar in North Dakota, will complete our planned network of five phased-array SLBM warning radars, and will allow us to shut down the aging FPS-85 and FSS-7 radars in Florida.

(c) Nuclear Detection System (NDS)

To improve our ability to detect, locate, and report nuclear detonations worldwide, we are procuring new, more accurate and survivable nuclear-detonation detection sensors for the satellites of the NAVSTAR/Global Positioning System (GPS). The new NDS sensors will be able to provide virtually instantaneous information on the scale and location of aboveground nuclear explosions in any part of the world. They will contribute to nuclear test ban monitoring in peacetime and would provide damage and strike assessment information to our command posts in the event of nuclear attack. The FY 1985 program includes installation and integration of the NDS sensors into the GPS host satellites. The system will become fully operational in the late 1980s.

(2) Command Centers

Command centers play a central role in the operation of the strategic C^3 system. Our strategic command centers must be able to survive a nuclear attack and continue to support decisionmaking and control of our strategic forces. Over the next five years, we will continue several important programs to increase the survivability and endurance of the National Military Command System.

Fixed command centers are our most capable command and control assets in peacetime, during crises, and in the early stages of a nuclear attack. Our principal efforts to upgrade the utility and efficiency of the National Military Command Center (NMCC) and the Alternate NMCC include providing additional protection against electromagnetic pulse (EMP) [1] effects, modernizing their electric power systems, and upgrading their information-processing equipment.

Similar improvements are in progress for our airborne command centers, which are more likely to survive a nuclear attack. By the end of FY 1985, we will have hardened all four E-4B National Emergency Airborne Command Post aircraft against EMP effects. We also are upgrading the automatic data-processing equipment aboard these aircraft, and to provide redundant communication links to our forces and sensor systems, we are equipping them with superhigh frequency (SHF) satellite communications terminals. (SHF communications are less susceptible to jamming and nuclear effects than communications transmitted in the ultrahigh frequency (UHF) band.)

We are also upgrading selected communications equipment aboard our fleet of EC-135 aircraft, which serve as airborne command posts for the Commander-in-Chief, Strategic Air Command (CINCSAC), and other nuclear force commanders. The modifications include hardening the equipment against EMP effects.

(3) Communications

Communications link the various elements of our strategic C^3 systems. They connect warning sensors to command centers; they enable information to be exchanged among command centers; and they link command centers with the nuclear forces. Although our first priority is to ensure that our forces would receive retaliatory orders, we are working toward more survivable two-way communications between commanders and their forces.

(a) Satellite Communications System

In FY 1983, the Air Force Satellite Communications (AFSATCOM) system became fully operational. This system provides one-way, low-data-rate communications to our strategic forces and two-way teletype communications for strategic force management. We have deployed AFSATCOM UHF terminals throughout our forces and our command and control networks. Various host satellites, including those of the Navy's Fleet Satellite Communications (FLTSATCOM) system and Defense Satellite Communication System (DSCS) Phase III satellites, carry AFSATCOM transponders.

Like the DSCS II satellites they replace, the new DSCS III satellites will be able to transmit large amounts of data very rapidly. They will have more EMP protection than DSCS II satellites, however. Because they will use SHF as well as UHF communications, they also will be more jam-resistant than either the DSCS II or AFSATCOM system. The DSCS III will transmit processed missile attack warning data from the Satellite Early Warning System to command centers. They also will provide a redundant link from E-4B command posts to our strategic nuclear forces. The first DSCS III satellite was launched in FY 1983; we plan for the full system to be operational by the mid-1980s.

To meet our need for effective continuous control of our forces, we are developing the Military Strategic and Tactical Relay (MILSTAR) satellite communications system. The satellites, now in full-scale development, will use extremely high frequency (EHF) communications, which are even less susceptible than SHF communications to the effects of nuclear detonations and jamming. The satellites also will incorporate a variety of survivability features to ensure their continued availability in a nuclear war. The EHF terminals will provide two-way communications links between commanders and their forces, allowing the forces to be redirected, as necessary, to increase their effectiveness. We are requesting funds in FY 1985 to begin construction of the satellites and to develop the EHF terminals.

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[1] The surges of current caused by the EMP effects of nuclear detonations can damage many types of electronic equipment that have not been adequately hardened.

(b) Ground Wave Emergency Network (GWEN)

The GWEN program is designed to enhance our ability to communicate with our bomber and ICBM forces in the early stages of a missile attack. Completely independent of the vulnerable civilian communications network, GWEN will comprise a set of ground-based, EMP-hardened communications relay nodes operating in the low frequency (LF) band. Each node will consist of transmitters and receivers installed on a radio tower with its own power supply. The first phase of the program, scheduled for installation and testing in FY 1985, will increase our confidence that bombers will receive timely warning of an attack. The second phase, to be completed in the late 1980s, will add substantially more nodes, increasing the system's survivability and giving us an alternate link to our ICBMs during and after an attack.

(c) Miniature Receiver Terminal (MRT)

To improve our ability to communicate with our strategic bombers after they have been launched on warning of a missile attack, we plan to equip them with miniature terminals for receiving very low frequency (VLF) communications. Though slower than transmissions in the higher frequency bands, VLF communications can be transmitted over much greater distances than line-of-sight UHF communications, and are much less susceptible to nuclear effects than UHF satellite communications. We plan to continue development of the system with funds requested in FY 1985 and to begin producing the terminals in FY 1987.

(d) TACAMO E-6A Aircraft

TACAMO aircraft, equipped with very low frequency (VLF) transmitters, are our most survivable command link to ballistic missile submarines at sea. We had planned to buy a new aircraft, called the E-6A, to replace the EC-130s currently performing the TACAMO mission. After a careful review, however, we concluded that the costs of the E-6A were too high. We have, therefore, decided to reevaluate our alternatives for upgrading the TACAMO aircraft fleet. In addition to the E-6A, we will consider other aircraft, including a modified version of the EC-130. Our objective is to maintain assured communications to deployed submarines in the most cost-effective manner possible.

(e) Extremely Low Frequency (ELF) Communications

To receive messages when submerged, submarines must deploy an antenna at or close to the ocean's surface. This constrains their operating depth and speed, and potentially discloses their location. To increase operational flexibility and minimize the possibility of detection, we are deploying a dual-site, extremely low frequency (ELF) communications system. The first site will be housed at the existing test facility, in Wisconsin. The second site, to be located in northern Michigan, will operate in electrical synchronism with the Wisconsin site. The ELF system will provide a highly reliable and jam-resistant means of maintaining continuous contact with the submarine force. We are requesting funds in FY 1985 to construct the transmission system and produce the associated receivers.

	FY 1983 Actual Funding	FY 1984 Planned Funding	FY 1985 Proposed Funding	FY 1986 Proposed for Authorization
Strategic Surveillance and Warning				
Development: $ Millions	287.2	319.7	265.4	184.6
Procurement: $ Millions	160.8	130.5	107.6	175.4
Strategic Command Centers				
Development: $ Millions	115.9	115.8	272.7	213.0
Procurement: $ Millions	28.1	30.4	54.4	111.8
Strategic Communications				
Development: $ Millions	452.7	690.1	684.9	790.6
Procurement: $ Millions	272.3	433.1	402.9	875.6

3. FY 1985-89 Programs for Nonstrategic Nuclear Forces

The most important modernization program for our nonstrategic nuclear forces in the absence of an INF arms reduction agreement is the deployment in Europe of 464 ground-launched cruise missiles (GLCMs) and 108 Pershing II ballistic missiles on launchers. To provide the diversified force required for effective deterrence, we are also continuing to modernize our nuclear artillery, tactical nuclear bombs, and sea-based missiles. Finally, we continue to seek improvements in our command, control, and communications systems and in the safety, security, and survivability of our nuclear weapon systems.

a. Longer-Range INF Missiles

The Pershing II, which has a range of 1,800 kilometers, is replacing the shorter-range U.S. Pershing IAs now deployed in Europe. GLCM's longer range of 2,500 kilometers allows it to attack targets deeper in enemy territory and to be based farther rearward, thereby increasing its pre-launch survivability and offering an opportunity for broader participation among the allies by hosting U.S. deployments on their soil. Because of their high accuracy, both Pershing II and GLCM can attack hard targets and limit collateral damage. The deployment of a mixed ballistic/cruise missile force provides the flexibility to select the best weapon for a given mission while hedging against the unexpected neutralization of either system, thus greatly complicating enemy planning.

Initial deliveries of GLCM in the United Kingdom and Italy, and of Pershing II in the FRG, took place in November 1983. Follow-on deployments to those countries, and GLCM deployments to Belgium and the Netherlands, are planned over the next several years. All of these deployments are subject to modification, cancellation, or reversal if a successful arms control agreement with the Soviet Union is achieved.

b. Short-Range Nuclear Forces

Countering the substantial expansion of the Soviet arsenal of nuclear-capable artillery, and discouraging Soviet first use of these systems, requires that we modernize our short-range battlefield nuclear systems. These systems also help offset the Soviets' massive numerical advantage in conventional weapons. The mere presence of these nuclear weapons could force the Soviets into dispersed formations, slowing the momentum of an attack. In this posture, enemy forces could more easily be attacked by conventional weapons.

Over the next five years, we will continue to improve the capabilities of our short-range nuclear forces. We have programmed funds to continue production of a new eight-inch artillery round, the W79, as a replacement for our aging stock of W33s. The new round offers significant improvements over the W33 in range, accuracy, and security.

The eight-inch cannon alone cannot satisfy combat mission requirements for artillery-fired atomic projectiles. The 155mm howitzer is NATO's dominant artillery piece. The large number of these weapons deployed throughout the force structure increases the survivability and flexibility of our short-range nuclear forces. The FY 1985 budget therefore includes a request to resume development of the W82, a new 155mm artillery projectile designed to replace the aging W48.

c. INF Aircraft

NATO's current dual-capable aircraft inventory consists of F-111, F-16, F-4, F-104, Tornado, Buccaneer, and Jaguar fighter-bombers. (Dual-capable aircraft can perform both conventional and nuclear missions.) As part of an ongoing modernization program, NATO is replacing its older dual-capable aircraft with more modern F-16 and Tornado fighter-bombers. In conjunction with NATO's program, we are continuing to upgrade our tactical bomb stockpile by deploying new bombs with improved military characteristics and enhanced safety and security features.

d. Sea-Based Systems

Our modernization program for sea-based nonstrategic nuclear forces will enable surface ships and submarines to counter the enemy air and submarine threats more effectively. A nuclear warhead for the SM-2 surface-to-air missile is under development, with initial deployment scheduled for the late 1980s. For the longer term, we are considering a nuclear capability for the new Antisubmarine Warfare Standoff Weapon (for submarine launch) and the Vertical Launch Antisubmarine Rocket (for surface ship launch), as well as a new air-delivered nuclear depth bomb. These would replace existing maritime nuclear systems.

e. C^3 Systems

We continue to seek improvements in the security, reliability, and capability of the command, control, and communications systems that support our nonstrategic nuclear forces. By FY 1989, we will have deployed two new communications networks. The first, a UHF satellite communications system, will link the headquarters of the European Command with its deployed forces. Initial fielding and operational testing of the UHF teletype communications terminals is expected this year. The second communications system will consist of reliable, secure, and jam-resistant high frequency (HF) equipment that has been hardened against EMP effects. We are evaluating alternative designs and expect to select a system for full-scale engineering development in FY 1984. A similiar C^3 system is planned to support nonstrategic nuclear forces assigned to the Pacific Command.

4. Conclusion

Under President Reagan's modernization plan, we are building nuclear forces and support systems that will be more capable and, at the same time, more difficult to attack than our current forces. The plan is firmly linked to our arms reduction efforts. Together, modernization and arms reductions will ensure a credible and stable deterrent well into the next century.

F. REGIONAL SECURITY

Our vital interests include defense of key forward theaters, usually with the assistance of local friends and allies. This chapter describes our planning goals with respect to areas of importance to U.S. national security objectives. It discusses U.S. force commitments, command relationships, and specific defense programs (unilateral and multilateral) in each region.

1. Regional Interests and U.S. Defense Planning

Over the next several years, we could find ourselves facing serious challenges in a number of areas around the globe -- perhaps simultaneously. In the last year alone, we have dealt with incidents and crises in such widely separated places as Lebanon, Chad, Central America, and the Caribbean. The Soviet destruction of Korean Airlines Flight 007 and the Rangoon bombing have served as brutal reminders that political tensions in the Far East also remain at a high level. Underlying political tensions and increasing Soviet-bloc intervention capabilities combine to create the conditions for unanticipated crises in many other areas. Our plans and programs must, therefore, focus on strengthening our ability to respond effectively, with military force if necessary, in several strategically important areas, and in circumstances ranging from small-scale incidents to major military operations.

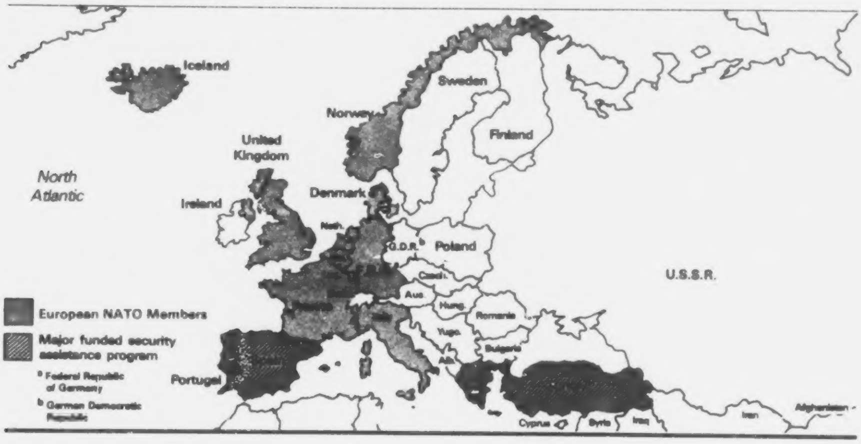
The need to deal with these strategic realities has led us to deploy substantial combat forces in Western Europe and the Pacific region in peacetime, while simultaneously withholding in the continental United States large numbers of active and reserve forces, some of which have the ability to deploy rapidly to trouble spots. As this chapter describes, we are particularly interested in improving our ability to deploy sizable combat forces to Europe (as reinforcements) and to Southwest Asia, an area where we do not maintain major peacetime deployments.

2. Western Europe/North Atlantic Treaty Organization (NATO)

NATO is unique among our alliances in that it provides, in peacetime, a comprehensive structure for political and military coordination that helps ensure an effective coalition defense posture. U.S. support of NATO's multilateral programs becomes particularly important as the Alliance implements the mandate provided by the June 1982 NATO Summit to strengthen NATO's defense posture, with special emphasis on conventional forces.

The vast majority of U.S. defense efforts in Europe are undertaken within the multilateral framework of NATO, or as bilateral arrangements that have a direct relationship to NATO objectives. These activities are extensive and varied, and our contributions to them complement those of our 15 allies. The resulting security benefits are far greater than we could obtain from comparable unilateral endeavors and expenditures.

Chart III.F.1
Europe


Iceland
Sweden
Norway
Finland
United Kingdom
North Atlantic
Ireland
Denmark
Neth.
G.D.R.b
Poland
U.S.S.R.
Czech.
Aus.
Hung.
Romania
Yugo.
Bulgaria
Alb.
Portugal
Cyprus
Syria
Iraq
Iran
Afghanistan
European NATO Members
Major funded security assistance program
a Federal Republic of Germany
b German Democratic Republic

a. U.S. Forces for NATO

Under NATO arrangements, most national forces in Europe remain under national command in time of peace. They are ready to come under NATO command in times of emergency or war.

We currently maintain in Europe four Army divisions and three separate brigades, along with 28 Air Force squadrons. Our goal is to be able to increase our forces in Europe to ten Army divisions and supporting Air Force squadrons and one Marine Amphibious Brigade within ten days of a decision to reinforce. In order to achieve this important goal, U.S. programs for prepositioning materiel and for improving airlift and sealift forces, as well as European programs for providing reception and related facilities, must be completed.

The Second Fleet is in place in the Atlantic and the Sixth Fleet in the Mediterranean. In the event of an emergency, these would be reinforced as worldwide maritime conditions permitted.

b. NATO Nuclear Planning

NATO's Nuclear Planning Group (NPG) is responsible for coordinating matters involving NATO's nuclear forces. At the present time, all members of the Alliance except Iceland and France are represented on the NPG and its subsidiary for special projects, the "High-Level Group" (HLG).

The HLG prepared the analyses and recommendations that led to NATO's December 1979 decision to deploy new, longer-range intermediate-range nuclear force (LRINF) missiles (Pershing II and ground-launched cruise missiles). A separate study group, set up under the North Atlantic Council, laid the groundwork for the other half of the two-part December 1979 decision: the commitment to seek, through negotiations with the Soviet Union, limitations on LRINF missiles. The HLG also conducted the study of Alliance nuclear needs that led to the October 1983 NPG decision to withdraw 1,400 nuclear weapons from Europe over the next five to six years. U.S. initiatives and programs in support of NATO's LRINF modernization and arms control goals are discussed in Part I and in the Nuclear Forces chapter of this report.

c. NATO Conventional Force Improvement Planning and Programs

NATO sets objectives for national force improvements, particularly in the field of conventional defense, by establishing "Force Goals." These goals take existing national capabilities as a baseline and establish, for each nation and in priority order, the steps the Alliance believes should be taken to improve them. The existing Force Goals call for a level of national effort based on annual real increases of 3% in national defense expenditures plus an additional "reasonable challenge" effort. In general, the United States and its allies are making significant progress toward achieving their Force Goals, particularly by modernizing their ground, tactical air, and naval forces -- improvements that are absolutely necessary to respond to the Warsaw Pact's own major improvement effort.

In the current economic situation, however, several NATO governments have set their defense spending at a level somewhat below a 3% real annual increase, in some cases reducing operations and training costs, in other cases delaying modernization plans. We will continue to press for adequate allied funding to achieve the Force Goals.

NATO is placing special emphasis on its air defenses. A great deal of effort has been put into developing a revised plan for air defense in Europe. A key feature of the plan will be the deployment of the U.S. Patriot surface-to-air missile system as a replacement for all Nike and some Hawk units in the Central Region.

To this end, in October 1982 we began exploratory talks with the Federal Republic of Germany (FRG) on possible joint solutions, based on equivalent contributions, to the problem of point and area air defense of air bases in Germany. The negotiations between the United States and the FRG have led to subsequent talks with the Netherlands and Belgium. We believe that joint air-defense arrangements will contribute to the important objective of more equitable burdensharing within the Alliance, and we welcome the support received from the Congress for these cooperative efforts.

A second area of special planning for improving NATO's conventional capability lies in the field of "emerging technologies." Because NATO's forces are outnumbered by the Warsaw Pact in some important categories -- armor, for example -- it is essential that the Alliance retain a qualitative lead in weapons technology by exploiting new opportunities in advanced weapons, munitions, command and control, intelligence, and communications. We will continue to work closely with our NATO partners to sustain the momentum of the emerging technologies effort and to encourage maximum allied participation in it.

d. NATO Infrastructure and U.S. Military Construction (MILCON) Programs for U.S. Forces in Europe

Under NATO's Infrastructure program, the Alliance members share the costs of constructing essential military facilities that their NATO-committed forces and NATO's international commanders would use in time of war.

In June 1983, with strong U.S. support, all participating NATO nations agreed to a significant increase in the Infrastructure program ceiling for FY 1980-84. This action has come closer to matching Infrastructure resources with needs, but NATO remains faced with major policy and financial decisions about backlogs, cost overruns, and growing requirements. We believe that the next multiyear Infrastructure program must be significantly larger if required facilities are to be completed in time to support the deployment of new units and weapon systems.

Thirteen NATO nations contribute to the full Infrastructure program. France joins the common funding for air defense warning installations, bringing the contributors in this area to fourteen. (Iceland has no military forces and thus is not involved; Spain does not participate in the Infrastructure program at this time.)

The NATO countries benefit economically from the Infrastructure program in several ways: general economic benefits devolve to host countries from the eventual operation, as well as construction, of new installations; all member countries compete for commercial contracts for construction and related goods and services; and the user nations benefit from allied contributions to facilities that their forces will use. The major economic benefits to the United States from the program are of the third kind: while the United States contributes 27.4% of total funding, approximately 35-40% of the projects programmed annually are in direct support of U.S. forces.

The NATO Infrastructure program funds only wartime operational facilities. Personnel support facilities and other predominantly peacetime projects are funded nationally, according to the standards of each country. Were such construction to fall under common funding, the 27.4% U.S. share of all such projects would far exceed the amount of U.S. MILCON funds currently required for construction in Europe.

e. Host Nation Support (HNS)

Host nation support has become a primary element in NATO's efforts to achieve a stronger military posture. Under such arrangements, our allies help unload and transport U.S. reinforcements and provide their follow-on resupply to forward locations in Central Europe; in addition, they perform other support and security duties.

We continue to make significant progress in developing and expanding wartime HNS arrangements with Germany, Belgium, the Netherlands, Luxembourg, and the United Kingdom. Implementation of the HNS agreement signed with the FRG on April 15, 1982, is proceeding on schedule. Activation of German Army reserve units began in 1983 and will continue through 1987. The agreement has also formalized Germany's previous commitment to provide extensive support from its civil sector during a crisis or war.

Implementation of this agreement will not occur at the expense of, or adversely affect, the readiness of U.S. Reserve Component forces. We are committed to improving our reserves, and our FY 1985 budget request makes extensive provisions for meeting their equipment needs. It is in the United States' interest to take full advantage of this opportunity to fill a critical gap in U.S. combat service support capability with the cost-effective HNS solution we have negotiated with Germany. We estimate that using German reservists will cost much less than providing equivalent capability with U.S. Reserve Component units.

f. Master Restationing Plan (MRP)

Over the past year, delegates from the United States and the Federal Republic of Germany continued their discussions on the MRP. This program would restation 20,000 troops from their present locations to U.S.-controlled land close to the East German and Czechoslovakian borders. We will continue talks on this important initiative.

g. Prepositioning of Materiel Configured to Unit Sets (POMCUS)

The storage of U.S. equipment at POMCUS sites in Europe is critical to our ability to reinforce NATO promptly in a crisis. Prepositioning this equipment is the least expensive and, indeed, the only practical way to guarantee a ten-division U.S. force at D-Day. The POMCUS program provides a concrete and significant example of allied burdensharing.

The Belgians and Dutch have expended considerable political capital and material resources to provide the land and certain supporting facilities for the POMCUS sites (Division Sets 5 and 6) in their respective countries. Moreover, through the NATO Infrastructure program, the Alliance as a whole has provided just over $200 million in common funding for construction. The work is moving forward. Storage sites in the Netherlands will be ready for use beginning in FY 1984, and the Belgian facilities are scheduled for completion the following year.

The Congress approved funding for Division Sets 5 and 6 last year, and we will begin stocking the sites as they become available. Completing this program will reduce our intertheater airlift requirements and increase significantly the size of our initial reinforcement of Europe during a period of crisis.

h. NATO Arms Cooperation

U.S. initiatives in the area of arms cooperation continue to emphasize codevelopment, coproduction, and the organization of research under "families" of weapons. We have negotiated general reciprocal memoranda of understanding with most allies to open competition by waiving "buy national" provisions.

Protectionist legislative restrictions adversely affect such cooperative defense programs with our NATO allies, as well as with other friendly governments. Restrictions also harm our own defense industries by reducing opportunities for the offsetting arrangements ordinarily associated with large arms purchases from the United States. Without these offsets, our allies may look to other sources for meeting their military equipment needs. In this respect, the action of the Congress in the FY 1983 Supplemental and FY 1984 Appropriations Acts to provide relief from restrictions on procurement of specialty metals from foreign sources was particularly welcome and will serve the best interests of the United States.

i. NATO Exercises and Cooperative Training

A major portion of the U.S. military exercise program is devoted to NATO exercises. The Reforger and Crested Cap series provide for annual deployment of units to Europe. We participate in the Standing Naval Force Atlantic, and in the exercises of the ACE Mobile Force and the Naval On-Call Force for the Mediterranean, when these two latter NATO groups are activated. All these international exercises are aimed at improving interoperability among national forces.

Each NATO member nation is responsible for training its own forces. But national forces must be able to operate together effectively under NATO command. The Euro-NATO Training Group, in which 12 NATO nations participate, conducts cooperative training projects in commonly agreed courses of instruction under joint faculties, using common doctrine, tactics, and procedures. Examples of such projects are joint jet and helicopter pilot training (conducted in the United States) and training in Europe on such diverse subjects as air-ground operations; logistics planning; mountain operations; engineer operations; and nuclear, biological, and chemical defense.

j. Security Assistance

Our security assistance and arms sales programs with the countries of NATO promote standardization and interoperability within the Alliance while contributing to needed improvements in NATO's capabilities. We have requested Foreign Military Sales (FMS) credits and/or Military Assistance Program (MAP) funds for Turkey, Greece, Spain, and Portugal. We also plan to continue the mutually beneficial arrangements under which our other NATO allies -- and friendly non-NATO countries -- acquire U.S. defense articles and services on a cash basis under the FMS program or through commercial channels.

The program for Turkey is especially urgent. It reflects that country's critical strategic location and the need to upgrade its obsolescent arms and equipment, especially Air Force aircraft and ground air defenses. Similarly, the programs for Greece, Spain, and Portugal support badly needed modernization efforts and advance common security interests, as evidenced in the recently completed bilateral base arrangements with those countries.

Table III.F.1

Major Funded Programs, FY 1985
($ in Millions)

Country	FMS Credits	MAP Grants	International Military Education and Training Program	Economic Support Funds
Greece	500	--	1.7	--
Portugal	55	70	3.0	80
Spain	400	--	3.0	12
Turkey	525	230	4.0	175

k. Burdensharing

The very foundation of the Atlantic Alliance is the concept that member nations have common aims that are more readily achievable through cooperative action. Cooperation implies that member nations will share the burden necessary to accomplish their common aims.

There is no single indicator of equitable burdensharing. Allied contributions to defense can best be understood by examining and comparing a variety of indicators of ability to contribute, on the one hand, and actual contributions on the other. Ability to contribute is assessed by such measures as gross domestic product and population. Actual contributions typically are measured by total defense spending, total defense manpower, and major force holdings. In the Report to Congress on Allied Contributions to the Common Defense, each of these measures will be thoroughly covered.

What is frequently overlooked is that the allies make important contributions to defense that are not directly covered by the quantitative indicators mentioned above. These include allied HNS, support by the FRG for Berlin, and earmarking of civilian assets for defense.

In addition, allied defense efforts must be viewed in their historical context. Over the past decade, the non-U.S. allies have gradually taken on more of the common burden. For example, between 1971 and 1981, real U.S. defense spending declined by 7% (exclusive of Vietnam war-associated reductions), whereas defense spending by our NATO allies increased by 23%. The United States is now engaged in an effort to redress some of the deficiencies that occurred during the years when U.S. defense resources were steadily declining.

At the same time, our allies clearly need to continue to enlarge their defense efforts, and we have urged them to do so. Our arguments are most likely to be successful if we maintain our own defense contribution in Europe at a high level. There is no evidence to indicate that U.S. troop withdrawals would spur our allies to do more on their own behalf. Indeed, all indications are that a withdrawal would have converse effects. To many Europeans, a unilateral withdrawal would convey the impression that the United States no longer considers the Warsaw Pact threat a serious problem. For others, such a pullout would lead to the conclusion that a successful forward defense is not desirable or achievable, thereby increasing the likelihood that accommodation would be sought with the East.

Rather than threatening withdrawals, the United States must lead by example. Indeed, we cannot afford to reduce our commitment to collective defense -- which is vital to our own national security -- while the threat to Western interests continues to grow.

3. Southwest Asia (SWA) and the Middle East

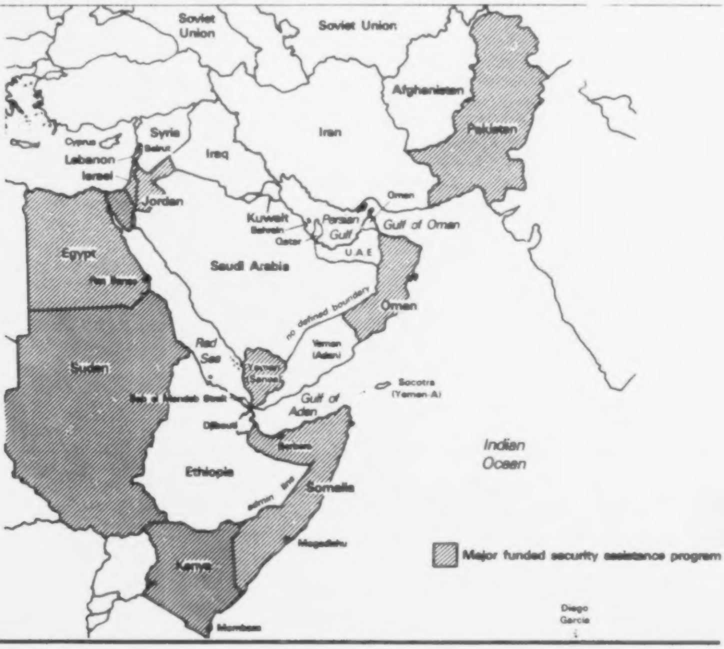
The political and military instabilities in SWA and the Middle East pose complex and dynamic challenges for U.S. defense planning. In response, President Reagan has steadfastly reaffirmed our commitment to protect U.S. and free world interests in the region, especially pursuit of a lasting Arab-Israeli peace and continued access to Persian Gulf oil.

In the past few years, we have dramatically improved our military capabilities for the region, primarily by enhancing the readiness and mobility of existing forces. Our programs for SWA and the Middle East continue to be the mainstay of a larger effort to revitalize our overall worldwide rapid-response capability.

a. The Region and Potential Conflicts

Chart III.F.2 depicts the general areas we refer to as SWA and the Middle East.

Chart III.F.2
Southwest Asia and the Middle East


Soviet Union
Soviet Union
Afghanistan
Pakistan
Iran
Syria
Cyprus
Beirut
Lebanon
Israel
Iraq
Jordan
Oman
Kuwait
Bahrain
Persian Gulf
Qatar
Gulf of Oman
U.A.E.
Egypt
Ras Banas
Saudi Arabia
no defined boundary
Oman
Red Sea
Yemen (Aden)
Yemen (Sanaa)
Sudan
Socotra (Yemen-A)
Bab el Mandeb Strait
Gulf of Aden
Djibouti
Berbera
Indian Ocean
Ethiopia
admin line
Somalia
Mogadishu
▨ Major funded security assistance program
Kenya
Mombasa
Diego Garcia

(1) Southwest Asia

It is our policy to support the independence and territorial integrity of friendly countries in this politically unstable region and to prevent a further spread of Soviet domination. In addition to our interest in the security of several friendly countries in the region, the fact that one-third of the free world's oil supply is produced in SWA makes the area vital to the interests of the United States and its allies.

Although SWA is the focus of our rapid deployment planning, we presently have no agreements to station combat forces permanently ashore in the area and maintain only a limited sea-based presence there. Furthermore, political conditions and agreements with friends and allies near the region, in Europe, and elsewhere along vital lines of communication influence the availability of transit facilities needed to support our rapid deployment strategy. As a result, many of our programs emphasize mobility and achieving access to countries en route to or near SWA.

Some of our programs for SWA have been completed, and many more are beginning to take effect. They have been very timely, for we have needed to use some of our new capabilities in the last year. For example, we have deployed AWACS aircraft to Saudi Arabia, and we supported Sudan in response to threats emanating from Libya. More recently, in response to regional concerns about an escalation of the Iran-Iraq war, we have expanded our security cooperation with the governments of several Persian Gulf states.

Our programs for the region must offer capabilities across a wide spectrum of potential conflicts. In most cases, we would provide only economic, technical, or security assistance. In other instances, we might provide military training and materiel. An overt Soviet invasion or direct military threat to our vital interests would, of course, pose a more demanding requirement for a military response that might involve the use of U.S. forces, together with the forces of friends and allies.

(2) Middle East

We support the security and territorial integrity of Israel and other friendly nations in the Middle East region. In contrast to our SWA programs, which are focused on improving our capability to provide rapidly deployable combat forces to protect our interests in the region, our efforts for the Middle East are oriented more toward providing security assistance and economic support. This is especially true in the case of Israel, whose military forces are sufficient to provide for its own territorial defense.

Sometimes, however, it has been necessary for the United States to provide direct military assistance to countries in the Middle East. During the current crisis in Lebanon, we have deployed U.S. Marine Corps units as elements of the multinational peacekeeping forces there. Further, in order to protect our Marine positions ashore, the U.S. Navy has provided naval gunfire and tactical air support from the eastern Mediterranean.

b. Command Structure and Forces

In January 1983, we created the United States Central Command (USCENTCOM), with headquarters at MacDill Air Force Base, Florida. This is our first new geographic unified command in more than 35 years. Its establishment highlights the importance we place on being able to deter or oppose Soviet aggression in the region.

While, in principle, most of our general purpose forces could be used for rapid-response missions, we have identified a certain number of units that could readily be allocated to USCENTCOM for this purpose. These units are shown in Table III.F.2. Later in the five-year planning period, as we improve our ability to move forces rapidly and provide adequate support, the number of ground units will be gradually expanded.

During peacetime, many of these combat units are assigned to the U.S. Readiness Command for purposes of training. Since they represent some of our most mobile and ready forces, they are available on a priority basis to the Commander-in-Chief, USCENTCOM (USCINCCENT) for his SWA mission. They are also available for rapid deployment missions in other regions.

Table III.F.2
Combat Forces Available to USCENTCOM

Army
1 Airborne Division
1 Airmobile/Air Assault Division
1 Mechanized Infantry Division
1 Light Infantry Division
1 Air Cavalry Brigade

Marine Corps
1⅓ Marine Amphibious Forces[a]

Air Force
7 Tactical Fighter Wings[b]
2 Strategic Bomber Squadrons[c]

Navy
3 Carrier Battle Groups
1 Surface Action Group
5 Maritime Patrol Air Squadrons

[a] A Marine Amphibious Force Typically Consists of a Reinforced Marine Division and a Marine Aircraft Wing (Containing Roughly Three Times as Many Tactical Fighter/Attack Aircraft as an Air Force TFW).

[b] Includes Support Forces, Does Not Include 3½ TFWs Available as Attrition Fillers.

[c] These Bombers and Associated Reconnaissance, Command and Control, and Refueling Aircraft Make Up the Air Force's Strategic Projection Force.

We recently established a small forward headquarters element (FHE) afloat with our naval Mideast Force in the Persian Gulf. As regional countries increase their interaction with USCENTCOM, we would expect to transfer more functions to the FHE.

c. SWA Regional Requirements

No matter where outside Europe we might send our rapid deployment forces, the problems they would face are likely to be quite different from those posed by a NATO/Warsaw Pact contingency. The forces would probably have to operate in distant theaters characterized by little or no regional U.S. presence, an inadequate infrastructure (e.g., limited road, rail, air transport, and communications networks), and a harsh climate or difficult terrain. Requirements for SWA are prime examples of the types of considerations we must incorporate into our rapid deployment strategy and programs.

Today, our peacetime presence in SWA is limited primarily to sea-based forces in or near the Persian Gulf. Therefore, we must be able to project additional forces very rapidly to this distant region and adequately sustain them in combat. Meeting these objectives will require:

-- Responding promptly to warning signals;

-- Developing mobility capabilities to deploy forces rapidly to and within SWA over extended air and sea lines of communication and to sustain them in combat;

-- Gaining approval for and developing land-based prepositioning sites;

-- Obtaining both overflight rights and en route access from several additional countries;

-- Securing lengthy air and sea lines of communication to sustain combat operations;

-- Obtaining access to and improving selected airfields and seaports in the theater;

-- Obtaining additional host nation support agreements with countries en route to and in SWA;

-- Improving our cargo loading and unloading capabilities to compensate for the lack of local infrastructure and trained personnel; and

-- Tailoring support (e.g., water, medical, communications, and transportation) for unique and austere combat operations.

The FY 1985-89 program responds to each of these challenges.

d. Key FY 1985-89 Program Initiatives

We have made an impressive start toward accomplishing our goals in SWA. The FY 1985-89 program supports and builds on existing efforts -- and in some cases adds critical new capabilities for the region. We must continue to give these programs high priority if we are to sustain our momentum and capitalize on the success of our earlier efforts.

(1) Command, Control, Communications, and Intelligence (C^3I)

A secure, survivable C^3I network is essential for conducting military operations in any theater, and it is one of our highest priorities in SWA, given the enormous area for which USCINCCENT is responsible. Communications facilities in SWA -- unlike those in other, more "mature" theaters -- are practically nonexistent, except in a few urban areas. We must procure communications equipment that is capable of operating over long distances, resistant to jamming, and easily transportable -- a formidable and costly task. We are requesting $240 million over the next five years to procure mobile, deployable C^3I equipment that will initially be stored in the United States, ready for rapid deployment to the region if needed.

Our plans call for establishing three major communications "nodes" at appropriate locations over FY 1985-89. In the interim, we will rely on our Joint Communications Support Element (JCSE) capability (which must also support other unified commands) and the C^3 capability provided by a Deployable Field Headquarters (DFH) to be operational in the next few years.

(2) Access and Improvements to Regional Facilities

We have reached formal agreement with several nations, and are pursuing negotiations with others, for permission to preposition materiel, to use regional facilities during crises, and to conduct routine training exercises during peacetime. In some cases, it has been necessary to improve existing facilities and other infrastructure. Construction at these sites was initially funded in FY 1980-81, and most of the programs are scheduled to be completed by the end of FY 1987.

Table III.F.3 shows our funding requirements for military construction projects in countries where we have, or expect to gain access.

It is important to emphasize that we are not creating new U.S. bases, per se, in SWA. Rather, we are improving existing host nation facilities that we might use to support U.S. forces in the region and are arranging for prompt access when needed.

Table III.F.3

Military Construction Funding for SWA-Related Facilities [a]
($ in Millions)

Location	FY 1980-84 Appropriated	FY 1985-89 Programmed
Egypt (Ras Banas)	55 [b]	--
Kenya	58	--
Oman	253	198
Somalia	54	--
Other	451	54
Total	871	252

---

a/ Does not include planning and design costs.
b/ FY 1984 Supplement Request.

Egypt has offered access to its facilities, including the strategically located base at Ras Banas on the Red Sea. The Egyptians are upgrading the airfield and port at Ras Banas, and we expect to build more facilities that would be unique to potential U.S. operations at that location. Once construction is completed, access to Ras Banas in time of crisis, when mutually agreed to by Egypt and the United States, would allow us to deploy forces to SWA or the Middle East much sooner than if we had to wait until we could directly enter the affected country. Apart from participating in routine exercises with Egyptian forces, however, we will maintain no military presence in Egypt in peacetime.

We have reached an agreement with Oman permitting us to improve, subject to the prior approval of the Omani government, selected facilities in that country for our use, primarily during crises but also in peacetime. Planned improvements include upgrading runways, taxiways, and aprons; constructing support facilities for personnel and maintenance; and preparing some locations for possible prepositioning ashore. Omani facilities are very important for extending sea control, basing tactical aircraft, staging ground forces, and supporting naval forces.

We have relatively small but important construction projects nearing completion in Kenya and Somalia. Kenya has allowed us to use its airfield and port facilities at Mombasa. This port is useful for maintaining and refueling ships, including aircraft carriers, and offers one of the few locations in the region for crew rest and liberty. Somalia has allowed us to use its seaports and airfields at Mogadishu and Berbera.

(3) Exercises and Training

Our ability to conduct combat operations in SWA or elsewhere is enhanced by combat exercises in and outside the theater, as well as through communications and logistics exercises and wargaming. Through such activities, we have already learned critical lessons. Because we believe they are essential for operational readiness -- as well as to demonstrate U.S. resolve in SWA -- we plan to continue a wide range of exercises in the SWA region. Our exercise program has been well received by many SWA nations and, as a result, should enjoy wider participation in the future.

Our most recent SWA exercise was Bright Star 83. This exercise lasted about 30 days and involved some 5,500 U.S. troops operating in four countries. In Egypt, our tactical air and airborne forces conducted field training and air-defense maneuvers with Egyptian troops and air-defense forces. In Sudan, we airdropped Army rangers for combined operations with the Sudanese Army. Our Marines practiced amphibious operations in Somalia.

(4) Intertheater Mobility

The intertheater lift programs planned for FY 1985-89 will significantly improve our ability to project forces into all theaters, particularly Southwest Asia. Airlift enhancements will more than double our ability to move forces -- primarily air defense and light Army units -- rapidly to this area. The Maritime Prepositioning Ship program will provide our first rapid-response capability for a heavy, division-sized Marine force. Our increase in government-controlled shipping will add the capability to move a two-division corps by sea, with one of the divisions moving on fast sealift. The Projection Forces chapter provides further details on these intertheater mobility enhancements.

e. Security Assistance

More than one-half of the $5.1 billion we are requesting for Foreign Military Sales (FMS) credits in FY 1985 will go to countries in the SWA/Middle East region, and all "forgiven" credits will be for Israel ($1.4 billion) and Egypt ($1.175 billion). More than half of the U.S.-provided Economic Support Funds (ESF) will be applied to further our economic and foreign policy objectives in the region. Table III.F.4 summarizes our major security assistance programs, by country and type of assistance.

The program for Israel will help that country defend itself against any combination of regional threats and ease the burden of its enormous defense effort. The program for Egypt continues our support for that nation's long-term military modernization plan, which includes a transition away from increasingly obsolete Soviet equipment.

The program for Jordan will remedy major deficiencies the Jordanian armed forces face in countering the growing Soviet-supported Syrian military buildup. The programs for Oman, Somalia, and Kenya complement our agreements for access to facilities in those countries and will help those governments cope with threats from neighboring states. Our substantial program with Pakistan contributes for the third year to a multiyear modernization plan necessitated by the Soviet invasion of neighboring Afghanistan. The program for Morocco supports U.S. efforts to help that country modernize its armed forces, and the program for Tunisia will help it resist Libyan-supported threats to its internal security.

These security assistance programs are provided on both a repayable-loan and grant basis. We also anticipate continuing requests from other countries, such as Saudi Arabia and the United Arab Emirates, to help modernize their armed forces through direct cash purchases of military equipment and services, including construction.

Table III.F.4

Major Funded Programs, FY 1985
($ in Millions)

Country	FMS Credits	MAP Grants	International Military Education and Training Program	Economic Support Funds
Egypt	1,175	--	2.00	750
Israel	1,400	--	--	850
Jordan	95	--	2.00	20
Kenya	--	23	1.80	55
Lebanon	15	--	0.80	20
Morocco	10	40	1.70	15
Oman	45	--	0.10	20
Pakistan	325	--	1.00	200
Somalia	--	40	1.25	35
Sudan	--	69	1.70	120
Tunisia	50	15	1.70	3
Yemen Arab Republic	--	10	1.50	--

f. Host Nation Support and Prepositioning Contingency Support

Our negotiations and plans for obtaining host nation support in SWA must consider the differing strategic priorities and perceptions of nations in that region; the absence of indigenous integrated command structures and common operational concepts; and the long lines of communications, large geographic barriers, political instabilities, economic uncertainties, and strong cultural biases that are prevalent. No nation in SWA is a formal ally of the United States, and all are wary of perceived superpower insensitivity to their sovereignty.

These problems, while formidable, are not insurmountable. We have approached several SWA countries with requests for host nation and contingency support and prepositioning of U.S. materiel. We have achieved some successes in this area, and we will be continuing discussions in the future.

To the extent that host nation support and prepositioning can be provided by regional nations during a contingency, our limited intertheater lift assets could deliver more combat forces and equipment during the critical early days of a deployment.

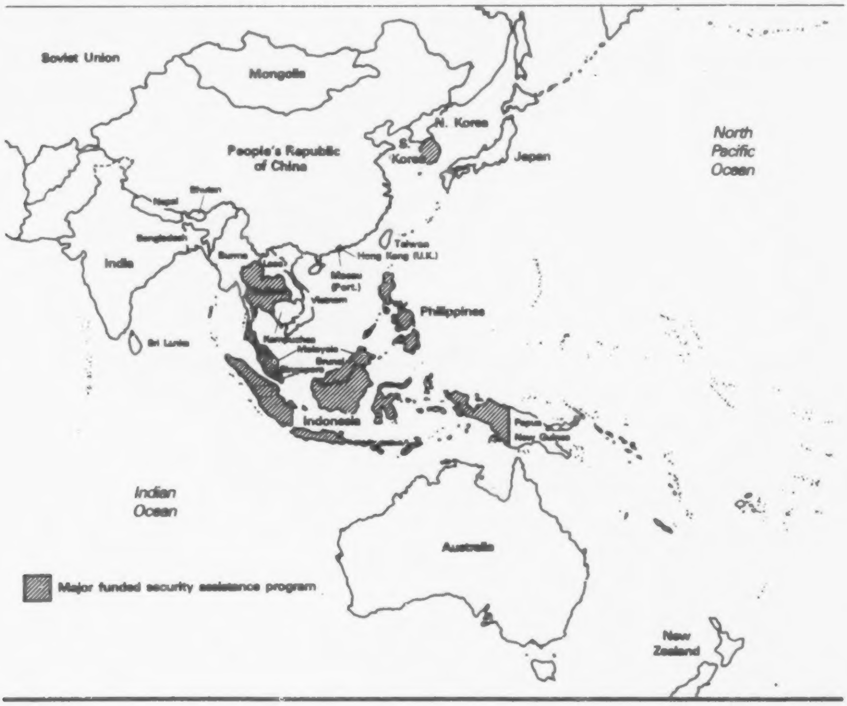
g. Allied Support and Cooperation

Many of our friends and allies have long experience -- and, in some cases, still maintain a presence -- in SWA. France, for example, has naval and tactical aircraft facilities in Djibouti that could help keep the Bab el Mandeb Strait open in a conflict. Similarly, the United Kingdom has provided military personnel to assist the Sultan of Oman's armed forces, and has made arrangements for our using and improving its facilities at Diego Garcia. Furthermore, the United Kingdom and France routinely deploy forces to the region. Depending on the situation, allied support and cooperation could be helpful in the event of a contingency.

France, Italy, the United Kingdom, the Netherlands, and Norway have also participated in multinational peacekeeping forces in the Middle East. European allies have provided en route support to U.S. forces deploying to SWA for exercises or other missions. Finally, we and our NATO allies are studying ways for the allies to compensate in Europe for any diversion of U.S. NATO-oriented forces to SWA in the event of a serious crisis in that region.

4. East Asia and the Pacific

Chart III.F3
East Asia and the Pacific Region


Soviet Union
Mongolia
People's Republic of China
N. Korea
S. Korea
Japan
North Pacific Ocean
Nepal
Bhutan
Bangladesh
India
Burma
Laos
Taiwan
Hong Kong (U.K.)
Macau (Port.)
Vietnam
Philippines
Sri Lanka
Kampuchea
Malaysia
Brunei
Singapore
Indonesia
Papua New Guinea
Indian Ocean
Australia
New Zealand
▨ Major funded security assistance program

East Asia and the western Pacific have important economic and security ties to the United States. In 1982, foreign trade with the countries of the region amounted to 30% of the U.S. total. Concomitant with our economic interests are numerous military relationships that underscore the United States' commitment to preserving the security and political stability of countries in the region. These commitments must be buttressed by forces in the region strong enough to deter the Soviet Union, North Korea, and Vietnam from attempting to interfere with the stability and independence of our allies and friends.

a. Command Structure and Forces

From his headquarters in Hawaii, the U.S. Commander-in-Chief, Pacific (USCINCPAC) controls forces spread across the Pacific and Indian Oceans. Major units assigned to USCINCPAC are shown in Table III.F.5.

Table III.F.5

Forces Assigned to USCINCPAC

Army

1 Infantry Division (Korea)
1 Infantry Division (Hawaii)

Air Force

1 Strategic Bomber Squadron
10 Tactical Fighter Squadrons
5 Tactical Support Squadrons

Marine Corps

1 Marine Division (–) (Okinawa)
1 Marine Brigade (Hawaii)
1 Marine Division (California)

Navy

6 Carriers with Air Wings
89 Surface Combatants
32 Amphibious Ships
40 Attack Submarines
12 Maritime Patrol Aircraft Squadrons

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b. Security Relationships

The size of the East Asia and Pacific region, the limited availability of our own forces, and the threat we face all argue for security relationships based on strong cooperation with our allies and friends.

(1) Japan

The cornerstone of our East Asian defense policy is our defense partnership with Japan, based on the Treaty of Mutual Cooperation and Security. Prime Minister Suzuki enunciated the goal for Japanese roles and missions when he stated in May 1981 that defense of Japan's territory, its airspace, and its sea-lanes out to 1,000 miles are legal under Japan's constitution and are, in fact, its national policy. Prime Minister Nakasone has been even more forthright in expressing what Japan's responsibilities should be under a national division of labor with the United States. We will continue to encourage Japan to achieve within this decade the force levels it needs to meet its defense requirements.

We plan to base F-16 aircraft at Misawa Air Base in Japan. Once deployed, these U.S. F-16s will provide improved air-to-surface capabilities to help redress the regional force imbalance in Northeast Asia.

(2) Republic of Korea (ROK)

On the Korean peninsula, U.S. and ROK forces face an adversary increasingly capable of offensive operations. Furthermore, North Korea has the capability to launch a massive attack with little advance warning. Together with the ROK and our United Nations partners, we must continue our efforts to strengthen U.S. and ROK capabilities. We will do so by helping ROK ground and air forces to modernize, and by achieving increased interoperability of air and ground support operations, improving C^3I systems, upgrading petroleum storage facilities, and improving contingency airfields. At the same time, we will continue efforts to reduce tensions and maintain peace in Korea.

(3) The Philippines

The United States and the Republic of the Philippines are bound together by the Mutual Defense Treaty of 1951 and the Military Bases Agreement (MBA) of 1947. U.S. military facilities in the Philippines play a key role in projecting American power in the western Pacific, East and Southeast Asia, and into the Indian Ocean. In June 1983, the United States and the Philippines successfully completed a review of the MBA, which will ensure the continued unhampered operation of U.S. facilities within the context of our long-standing defense relationship.

(4) Thailand

The preservation of Thailand's independence and territorial integrity is central to the stability of Southeast Asia. We will continue to provide Thailand with assistance to bolster its self-defense capability against Soviet-supplied hostile forces, primarily Vietnamese, on its borders.

(5) Australia and New Zealand

The ANZUS Treaty links two of our oldest and staunchest allies, Australia and New Zealand, with the United States in defense efforts that are the keystone of our defense policy in the South Pacific.

c. Security Assistance

Table III.F.6

Major Funded Programs, FY 1985
($ in Millions)

Country	FMS Credits	MAP Grants	International Military Education and Training Program	Economic Support Funds
Indonesia	40	--	2.7	--
Korea	230	--	2.0	--
Malaysia	10	--	1.0	--
Philippines	60	25	2.0	95
Thailand	98	5	2.4	5

More than half of the proposed FMS credits for East Asia and the Pacific region support the ROK Force Improvement Plan ($230M); much of the remaining FMS credit request for the region is directed to the Philippines ($60M). Other major recipients of FMS credits include Indonesia ($40M), which sits astride very important lines of communication, and Thailand ($98M), which faces persistent pressures from Vietnamese forces in neighboring Kampuchea.

d. Regional Exercises

Annually, we conduct five major exercises with the ROK, including Team Spirit, which is the largest combined field-training exercise in the world. We also participate in annual exercises with Japan, Thailand, and the Philippines. Again this year, we will participate in Rimpac, a naval exercise that includes forces from Japan, Canada, Australia, and New Zealand.

5. Western Hemisphere

The Rio Treaty embodies our long-standing commitment to the security of our Latin American neighbors. It is within the context of that treaty that we formulate our security policy for the region. Without a secure environment, there is little hope that we can achieve other regional objectives -- to promote democracy, economic development, and dialogue and negotiations both within and between regional states. In order to help create a secure environment:

-- We provide security assistance to those states in the region most vulnerable to externally supported internal subversion. Together with economic assistance, military assistance must be at levels that allow recipient countries to establish and maintain adequate internal security.

-- We attempt to counter Soviet and Cuban presence and influence through our military and economic aid programs. We seek to prevent the growth of contacts between the Soviet Union and hemispheric countries, since such contacts can directly threaten our collective security.

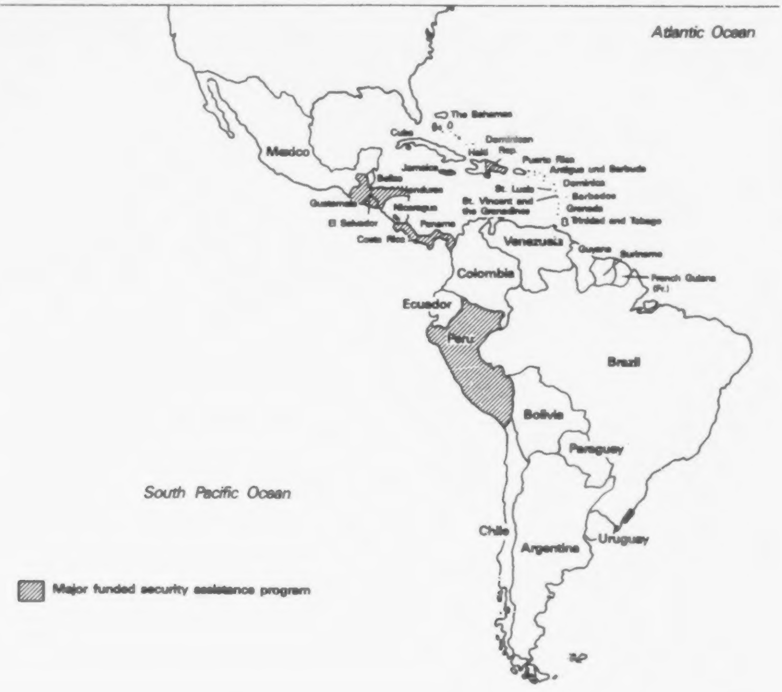
-- We maintain the security of important trade and sea-lanes in the Caribbean.

a. Command Structure and Forces

The Commander-in-Chief, U.S. Southern Command, with headquarters in Panama, has geographic responsibility for Central and South America. The Commander-in-Chief, U.S. Atlantic Command, with headquarters in Norfolk, Virginia, has responsibility for the Caribbean and the ocean areas surrounding the Central and South American land mass.

In Latin America, the United States maintains an Army infantry brigade in Panama together with small Air Force and Navy elements. These forces could be quickly reinforced by units from the United States, if required. The United States conducts frequent air, land, and naval exercises in the Caribbean Sea area, and maintains bases in Puerto Rico; Guantanamo Bay, Cuba; and Florida.

Chart III.F.4
Latin America


Atlantic Ocean
The Bahamas
Cuba
Mexico
Dominican Rep.
Haiti
Puerto Rico
Jamaica
Antigua and Barbuda
Belize
Honduras
Dominica
St. Lucia
Barbados
Guatemala
St. Vincent and the Grenadines
Nicaragua
Grenada
El Salvador
Panama
Trinidad and Tobago
Costa Rica
Venezuela
Guyana
Suriname
Colombia
French Guiana (Fr.)
Ecuador
Peru
Brazil
Bolivia
Paraguay
South Pacific Ocean
Chile
Argentina
Uruguay
▨ Major funded security assistance program

b. Programs

Under the terms of the Panama Canal Treaty, the United States will retain responsibility for defense of the Panama Canal through the year 1999. To maintain our capability to meet that commitment, we are proposing a program of modest improvements to U.S. bases and forces stationed in Panama. We will also continue a vigorous exercise program in Latin America and the Caribbean in order to provide necessary training for U.S. forces as well as demonstrate our ability to support friends and allies in the region.

c. Security Assistance

Latin American security assistance efforts have included providing training courses in the United States and in Panama, and assisting in the establishment of the new Regional Military Training Center in Honduras. This latter facility enables us to train the armed forces of Central American nations with greater efficiency. Training at this facility can be provided at less cost to regional states than comparable training in the United States.

In the Caribbean, we will continue support for the Caribbean Peacekeeping Force as it assists the interim government of Grenada in restoring democracy to that island. Other security assistance programs in the Caribbean are aimed at assisting the island governments in achieving adequate self-defense capabilities.

The major portion of our regional funding request is concentrated on El Salvador and Honduras. These programs seek a judicious balance between military and economic assistance to deal with interrelated economic, social, and national security problems.

Table III.F.7

Major Funded Programs, FY 1985
($ in Millions)

Country	FMS Credits	MAP Grants	International Military Education and Training Program	Economic Support Funds
Costa Rica	b/	b/	b/	b/
Dominican Republic	5	3	0.75	45
Eastern Caribbean	--	5	0.30	20
El Salvador	b/	b/	b/	b/
Guatemala	b/	b/	b/	b/
Honduras	b/	b/	b/	b/
Jamaica	--	5	0.25	70
Panama	b/	b/	b/	b/
Peru	10	--	0.85	--
PACAMS a/	--	--	6.00	--

---

a/ Military schools in Panama.
b/ To be determined.

d. Regional Exercises

One of the most successful programs for Western Hemisphere cooperation has been the Unitas cruise program. The 1983 cruise was the 24th to take place since the program's inception in 1960. Nine South American and Caribbean countries participated in this exercise and planning is under way for the Silver Jubilee Unitas cruise in 1984.

The Big Pine exercises in Honduras are the latest in a series of combined exercises that we began in 1965 with Latin American armed forces. These exercises have improved our ability to operate with the armed forces of Honduras and given us an opportunity to practice the deployment and operations of U.S. forces in the region.

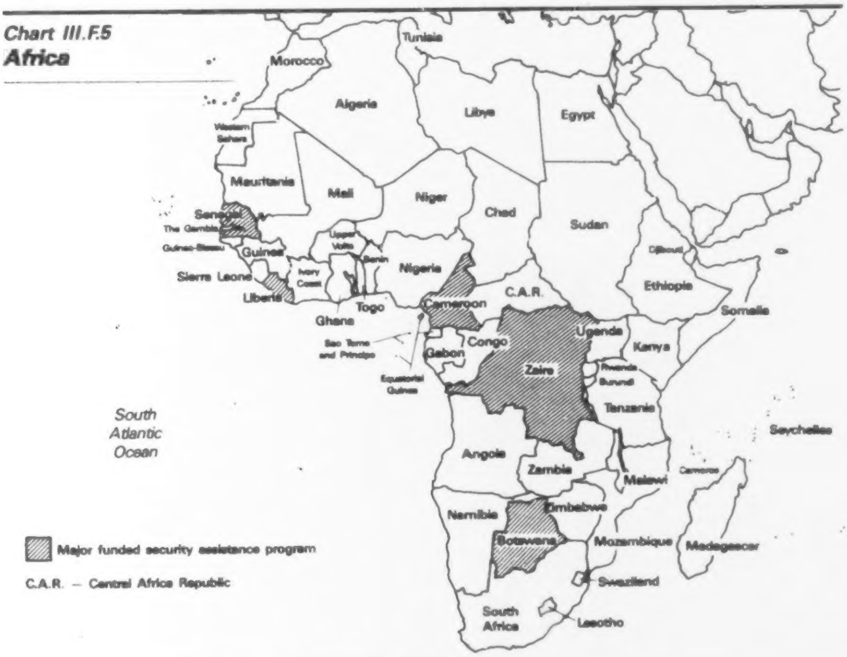
6. Africa

In Africa, we seek an environment in which nations can achieve political stability, territorial security, and economic well-being. Since 1978, the Soviets have created a virtual arsenal in North Africa by providing Libya supersonic fighter aircraft, surface-to-air missiles, field artillery units, tanks, and self-propelled assault guns. Libyan aggression and plotting have directly threatened neighboring countries such as Tunisia, Egypt, Somalia, Sudan, and especially Chad, as well as countries farther away in sub-Saharan Africa. In addition, there are more than 8,000 Soviet advisors in Algeria.

The Soviets, in concert with Cuba and Eastern-bloc states, also supply large amounts of materiel and training in the sub-Saharan region. In addition to Soviet arms and advisory assistance, about 9,000 Cuban military personnel, many of them combat troops, were stationed in Ethiopia at the end of 1983. In Angola, more than 20,000 Cuban troops are attempting to protect the Marxist government there against a growing resistance, in part to help assure Soviet access to military facilities and to continue use of Angola as a base for supporting "liberation movements" in southern Africa. Elsewhere in sub-Saharan Africa, in such countries as Mozambique and the Congo, there are sizable contingents of Soviet, Cuban, and East German advisors.

U.S. efforts to deter Soviet-backed adventurism have included providing African countries, such as Chad, with equipment for their own defense, and deploying AWACS aircraft to Egypt to enable other countries of the region to counter Libyan military threats. By conducting military exercises with Sudanese and Somali forces and annual training visits by U.S. Navy units to several West African nations, we have also helped the nations of Africa increase their military forces' effectiveness.

Chart III.F.5
Africa


Tunisia
Morocco
Algeria
Libya
Egypt
Western Sahara
Mauritania
Mali
Niger
Chad
Sudan
Senegal
The Gambia
Guinea-Bissau
Guinea
Upper Volta
Benin
Djibouti
Sierra Leone
Ivory Coast
Nigeria
Ethiopia
Liberia
C.A.R.
Togo
Cameroon
Somalia
Ghana
Sao Tome and Principe
Congo
Uganda
Kenya
Gabon
Zaire
Rwanda
Burundi
Equatorial Guinea
Tanzania
South Atlantic Ocean
Seychelles
Angola
Zambia
Malawi
Comoros
Namibia
Zimbabwe
Botswana
Mozambique
Madagascar
Swaziland
South Africa
Lesotho
▨ Major funded security assistance program
C.A.R. – Central Africa Republic

a. Command Responsibilities

The U.S. Commander-in-Chief, Europe, has general responsibility for northern Africa, while the Commander-in-Chief, U.S. Central Command, has responsibility for eastern Africa.

b. Security Assistance

Very few friendly African nations can afford military purchases, and many therefore depend on U.S.-funded assistance to meet their security requirements.

Most of our security assistance request will enable recipient countries to maintain programs already under way. We anticipate few transfers of major systems, but significant efforts in training and follow-on support and spares are planned. The major country programs include Liberia in West Africa, especially to continue its military housing project, and Zaire in Central Africa. We are planning FMS guarantees for two African countries and MAP grants for 18; 15 countries would be recipients of Economic Support Funds. A major new initiative is the Civic Action Program (CAP), which will increase the capabilities of regional navies and coast guards to patrol territorial waters.

Table III.F.8

Major Funded Programs, FY 1985
($ in Millions)

Country	FMS Credits	MAP Grants	International Military Education and Training Program	Economic Support Funds
Botswana	5	4	0.3	10
Cameroon	5	--	0.2	--
Liberia	--	15	1.2	45
Senegal	--	3	0.5	15
Zaire	--	15	1.4	15
CAP	--	5	--	--

G. MATERIEL READINESS, SUSTAINABILITY, AND OTHER LOGISTICS

1. Introduction

Improving the readiness and sustainability of our combat forces continues to be a top priority of this Administration. We believe that if our forces, as well as the forces of our allies and friends, are well-equipped, combat ready, and capable of conducting sustained combat operations -- and are perceived as such -- we will be able to deter or, if necessary, defeat any aggression against our vital interests.

When the Reagan Administration took office in early 1981, the readiness and sustainability of our combat forces were alarmingly low. Equipment readiness and mission capable rates were at low points and heading lower; maintenance backlogs persisted at most repair facilities; and inventories of spares and repair parts were shrinking, with no near-term prospect for relief -- all due largely to a decade of underfunding. Also, war reserve inventories of munitions, spare parts, and secondary items were woefully inadequate to support a sustained conflict. Meeting peacetime supply needs by robbing from war reserve stocks and stripping parts from equipment had become the rule rather than the exception, degrading our forces' warfighting capability even further. The requirement to provide the logistics base and follow-on support for a modernized force compounded our logistics problems.

We immediately set about to redress these deficiencies. Our challenge was to reverse almost a decade of neglect in just three to four short years. We substantially increased funding for readiness and sustainability in each of the past three budgets and are now beginning to see real progress. The FY 1985 budget proposal continues that trend.

Readiness and sustainability are assessed in terms of both materiel and personnel. Personnel readiness is discussed in the Manpower chapter. Materiel readiness and sustainability are addressed here.

2. Materiel Readiness and Sustainability

a. A Profile of Readiness and Sustainability

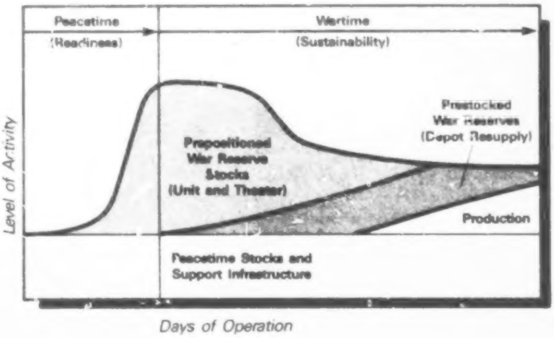
As the basis of our assessment, let us first consider the meaning and application of materiel readiness and sustainability in the context of total military capability during peace and war. Chart III.G.1 will help guide the discussion.

The upper bound of the curve shows changes in the activity level of forces as they move from peacetime operations through sustained wartime operations. During a conflict, forces operate at substantially higher activity levels, especially during the crucial early days. The area under the curve represents the amount and type of resources needed to support peacetime and wartime operating tempos. These resources include peacetime stocks and the support infrastructure for day-to-day operations, and war reserve materiel for resupply during combat operations.

The readiness side of the chart is essentially a measure of peacetime capability and equipment status. It also reflects our ability to bring our forces to combat-ready status and to deploy them in a crisis. Materiel readiness involves two principal components: (1) inventories of equipment and supplies on hand relative to wartime requirements and (2) the ability of this equipment to perform its assigned tasks.

Sustainability is the "staying power" of the force during combat operations. It is usually measured in days. Materiel sustainability is our ability to replace those resources consumed or attrited during combat. It is a function of peacetime stocks, the support infrastructure, war reserve materiel, and industrial production.

Chart III.G.1
A Profile of Readiness and Sustainability



b. Readiness and Sustainability Resources

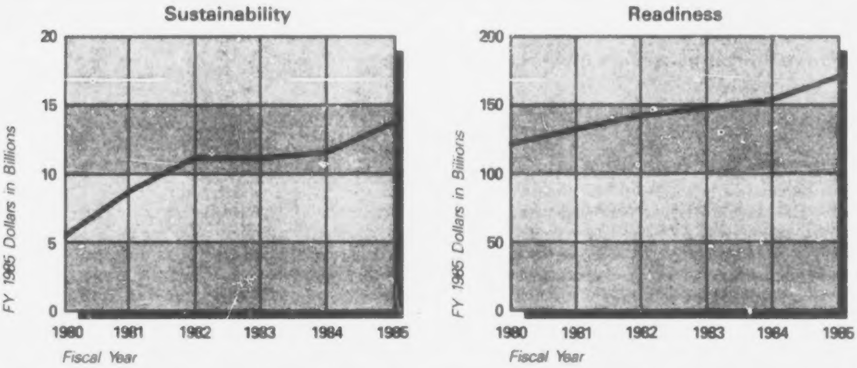
The primary logistics resources that influence materiel readiness and sustainability are shown in Table III.G.1.

Table III.G.1
Readiness and Sustainability Resources

Readiness	Sustainability
Peacetime Spare Parts	War Reserves of:
Depot-Level Repair	Munitions
Stock Fund Inventory Augmentation	Repair Parts
Weapons and Equipment Inventories	Petroleum, Oil, and Lubricants (POL)
Modifications	Weapons and Equipment
Support Infrastructure	Industrial Production
Installations	
Training Munitions	

Chart III.G.2 illustrates trends in total readiness and sustainability funding between FY 1980 and FY 1985. In real terms, funding for readiness has risen by 40% and sustainability funding by 155%.

Chart III.G.2
Total Readiness and Sustainability Funding



The following paragraphs describe selected logistics resources, explain their impact on readiness and sustainability, and review funding levels for FY 1981-85. The annual Force Readiness Report, sent to the Congress each February, provides additional information on readiness and sustainability funding, weapon systems inventories, actual and projected materiel readiness trends, and our efforts to improve our ability to relate resources to readiness and sustainability.

c. Funding-to-Readiness Lag

Real improvements in readiness and sustainability are paced by procurement lead times. (The term "lead time" refers to the period between the time funds are obligated and the time items are delivered.) For many items, lead times can run as long as two or three years. For example, funding appropriated for spare parts in FY 1985 will not produce increased inventories until FY 1987 or later. Conversely, funding for depot maintenance provides usable components within a few months, since repairing an item is faster than building a new one. Delivery time for repair parts bought through the stock fund averages about one year. The essential message is that today's peacetime readiness and wartime sustainability are largely a function of prior years' funding -- in some cases, dating as far back as FY 1980. Similarly, the FY 1985 budget will have a substantial -- and, in large measure, irreversible -- impact on future readiness and sustainability.

d. Materiel Readiness Resource Funding

The materiel readiness of weapon systems and equipment is influenced most dramatically by funding in three resource categories: spares and repair parts, depot maintenance, and weapon systems modifications.

(1) Spares and Repair Parts

Spares and repair parts are needed to keep equipment operationally ready and available both for peacetime training and for initial combat operations. To ensure that we pay fair and reasonable prices, we are making several major changes in the way we order and purchase spare parts. These initiatives are described in the Management chapter.

All spares and repair parts fall into one of two general classes: repairable and consumable components.

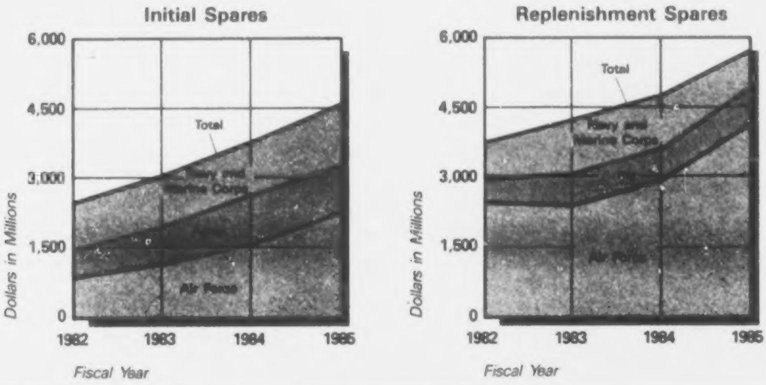
(a) Repairable Components

When part of a weapon system fails, that component must either be repaired or replaced. Usually, repair is given first priority, since it can generally be accomplished for 15% to 25% of the cost of new procurement. Most components, however, have a finite repair life, so items must be bought to replace assets condemned during repair. Items must also be procured to support new, modernized, or increased numbers of systems entering the force structure; to allow for increased procurement lead times; to support readiness initiatives; and to build war reserve inventories.

The repairable spares program consists of two distinct elements: initial spares and replenishment spares. Initial spares are associated exclusively with weapon systems being fielded for the first time or with modifications to equipment currently in the inventory. Replenishment spares provide continuing support over the life of a weapon system. Requirements for replenishment spares are usually based on engineering estimates or actual usage, which is then applied to programmed force activity.

Chart III.G.3 summarizes the trend in funding for peacetime repairable spares during FY 1982-85. The significant increases each year clearly demonstrate our emphasis on improving peacetime readiness. As the chart shows, the FY 1985 budget for peacetime repairable spare parts is $10.2 billion -- 37% higher in real terms than in FY 1982. These increases are urgently needed to satisfy not only those requirements generated by new and modernized equipment, increased force activity, and program changes, but also those requirements unfunded in prior years.

Chart III.G.3
Peacetime Repairable Spares Procurement



	FY 1982	FY 1983	FY 1984	FY 1985	FY 1982	FY 1983	FY 1984	FY 1985
Navy & Marine Corp	1,022	1,061	1,116	1,302	789	1,203	1,190	815
Army	598	815	1,049	1,014	513	599	686	768
Air Force	878	1,156	1,583	2,227	2,438	2,436	2,923	4,118
Total	*2,498*	*3,032*	*3,748*	*4,543*	*3,740*	*4,238*	*4,799*	*5,701*

(b) Consumable Spare Parts

Consumable spare parts are used at all levels of maintenance to fix faulty components and repair major systems. Shortages of these relatively inexpensive items can cause major weapon system downtime at field or depot locations. Funding consumable items is, therefore, as important as funding repairable spares and depot-level repair.

Most consumable spare parts are financed by DoD stock funds, which operate under a revolving fund concept. As such, the cash required to pay for materiel procured is generated from sales to maintenance organizations and operating activities. In the mid-1970s, as we withdrew from Vietnam and reduced the force structure, stock fund inventories were drawn down and converted to cash. As a result, the additional cash we needed for additional inventory was readily available. In recent years, the reverse has been true -- inventory requirements have grown due to force expansion and modernization, and we experienced higher-than-expected inflation. To ensure that the stock funds can finance the required buildup in inventories, the FY 1985 budget includes a cash augmentation of $1.3 billion, as shown in Table III.G.2.

Table III.G.2

Stock Fund Inventory Build Requirements
($ in Millions)

	FY 1983	FY 1984	FY 1985
Army	0	147	156
Navy	230	590	488
Marine Corps	0	0	4
Air Force	51	1,107	523
Defense Logistics Agency	0	0	99
DoD Total	281	1,844	1,270

(2) Depot Repair Funding

Depot-level repair funding can significantly influence materiel readiness. Repaired components are available faster, and are generally cheaper, than newly procured items and, therefore, have a more immediate influence on weapon system availability. Despite the funding increases provided last year and requested for this year, a depot maintenance backlog will remain at the end of FY 1985. Backlogs do not represent a departure from the Department's goal of fully funding depot maintenance requirements where feasible, but rather represent the impact of limited resources and the realities of the hard program choices that must be made within constrained resource levels.

(3) Modifications

Weapon systems are modified to correct problems identified during development or operational use. They include changes to enhance the capability of existing systems, improve their reliability and maintainability, incorporate operational and safety modifications, and extend their service lives. Procurement funding for modifications of weapon systems and related support equipment is shown by Service for FY 1983-85 in Table III.G.3.

Table III.G.3

Modification Funding [a/]
($ Millions)

	FY 1983	FY 1984	FY 1985
Army	799	1,171	1,484
Navy and Marine Corps	1,318	1,548	2,197
Air Force	2,558	2,764	3,544
Total	4,675	5,483	7,225

---

a/ Reflects procurement funding; installation costs are funded by the operations and maintenance accounts.

e. Materiel Sustainability Resource Funding

Beyond readiness, we are also concerned about sustainability -- the staying power of our forces in combat. The components of materiel sustainability include the industrial base (discussed in Part II, Chapter C) and war reserve materiel and the support infrastructure, discussed here.

(1) War Reserve Materiel

War reserve materiel is the additional inventory of weapons, equipment, secondary items, munitions, and fuel procured to support the much higher wartime activity levels and to replace those resources consumed or attrited during combat operations. Because procurement lead times for many of these items often exceed two or three years, and because we cannot predict the warning time or duration of any conflict, we must provide for sustainability in advance -- materiel must be on hand and ready to use at the time we transition from peacetime to wartime operating tempos.

Our long-range objective is to possess war reserve stocks large enough to sustain wartime operations until industrial production can provide the required support. Unfortunately, our materiel sustainability posture has been constrained over many years, leaving us far short of the level possessed by the Soviets. While we strongly desire to correct this imbalance as soon as possible, we know this objective may not be fully attainable in the mid-term. Accordingly, we have established two sustainability objectives (days of wartime support) for forces programmed for combat in each major theater. These objectives include a high risk level to be funded by FY 1988, and a more prudent level, to be funded by FY 1991.

The following paragraphs identify selected categories of war reserve materiel that contribute to combat sustainability, and discuss current and projected funding levels in each area.

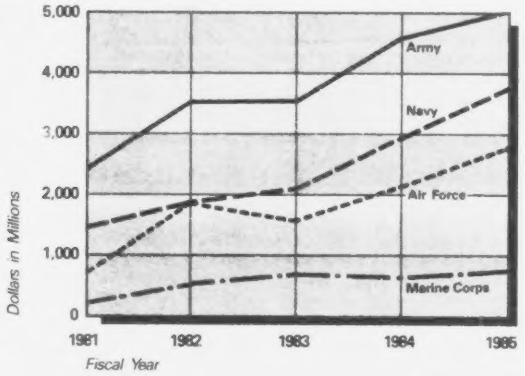
(a) Munitions

Our stockpile of war reserve munitions remains in transition from older, Vietnam-era types to a new generation of much more effective munitions necessary to help offset the numerical superiority of our potential adversaries.

Requirements for munitions are computed annually considering U.S., allied, and enemy forces; weapons effectiveness; and cost. The types and amounts of munitions we are proposing to buy represent the most cost-effective mix projected to be available during the five-year program period. The more than $12 billion we have budgeted for munitions in FY 1985 will help achieve our mid-term sustainability levels by the FY 1988 funded delivery period. The munitions procurement program for FY 1985 and the four prior years is shown in Chart III.G.4.

Chart III.G.4

Munitions Procurement[a]



	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
Army	2,403	3,533	3,568	4,592	5,013
Navy	1,471	1,864	2,088	2,943	3,716
Air Force	713	1,857	1,595	2,136	2,773
Marine Corps	183	521	687	655	718

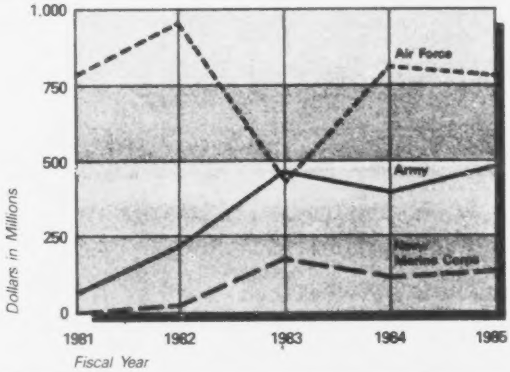
[a] Includes WRM and training ammunition and tactical missiles.

(b) Secondary Items

Secondary items include repairable components, consumable repair parts, personnel support items (e.g., uniforms and combat rations), and a large number of low-cost consumable items. The vast majority of the approximately 3.8 million types of items in the DoD supply system are classified as secondary items. Of those, about 200,000 have been designated crucial enough to our combat capability to justify maintaining war reserve inventories of them. Although secondary items account for a relatively small portion of the dollar value of our total war reserves, shortages of them can severely degrade our combat capability and can be as important as shortfalls in major equipment and munitions.

Chart III.G.5 illustrates trends in funding levels for war reserve secondary items during FY 1981-85. The $1.4 billion we have budgeted for these items in FY 1985 represents an increase of 28% in real terms over the amount expended in FY 1981.

Chart III.G.5
War Reserve
***Secondary Items Funding*[1]**
(Dollars in Millions)



	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
Air Force	781	954	432	803	779
Army	62	214	464	392	476
Navy/Marine Corps	0	25	173	116	134
Defense Logistics Agency	0	0	5	0	0
Total	*843*	*1,193*	*1,074*	*1,311*	*1,389*

[1] Includes stock fund (excluding fuel) and procurement accounts

(c) Fuel

Inventories of prepositioned fuel continue to fall short of our objectives. During the past year, we validated our requirements and refined our strategies for obtaining additional fuel and storage facilities. The program satisfies our requirements at the lowest possible cost commensurate with an acceptable degree of risk. Our major challenge is to ensure that enough fuel would be available for our forces to operate in areas of the world where we maintain no peacetime military presence or have no logistic infrastructure in place. In such cases, we rely on host nation support or commercially leased petroleum storage facilities and equipment.

(2) Weapon Systems and Equipment

Both the Army and the Marine Corps continue to procure combat attrition replacement parts for major items of ground force equipment such as tanks, armored personnel carriers, and artillery. The Air Force has undertaken an extensive program to preposition war reserve materiel in Southwest Asia and Europe. These programs are covered in detail in the Land and Tactical Air Forces and Force Projection chapters.

f. The Results of Materiel Readiness and Sustainability Funding

Our commitment over the past three years to increasing funding for readiness and sustainability resources is beginning to pay handsome dividends. Much of the materiel purchased in FY 1981-82 is now beginning to arrive in the field in significant amounts, and materiel status indicators and other logistics measures show positive trends. The following discussion highlights six areas showing the impact of increased investment for readiness and sustainability.

(1) Weapon System Condition Status

An important measure of the condition of weapon systems and equipment operated by our land forces is the fully mission capable (FMC) rate. Air forces use mission capable (MC) rates to indicate the operating status of their systems, whereas a comparable measure for naval ships is called the command operationally ready (COR) rate. Each of these measures is expressed as a percentage of the weapons and equipment in the inventory that are capable of performing their mission. A system or item of equipment is considered mission capable when it can safely perform at least one of its assigned missions. It is considered fully mission capable when it can perform all of its missions.

MC, FMC, and COR rates are influenced by many factors such as maintenance scheduling, repair parts shortages, special inspection or overhaul requirements, equipment activity levels, steaming and flying hour requirements, inventory levels of equipment and systems, and the skill levels and manning status of maintenance and support personnel. Some of these factors, such as scheduled maintenance, can be managed; others, such as equipment failures, are random events and cannot be predicted.

A certain percentage of weapons and equipment in the inventory will always be in a non-mission-capable status. During regularly scheduled maintenance periods, for example, an aircraft or item of equipment is considered to be non-mission-ready, yet this maintenance is vital to the continued safe operation of the system.

The Services have established mission capability goals, which represent the optimum balance between scheduled maintenance "downtime" and operationally ready requirements. These goals vary for each weapon system depending on special maintenance and support requirements and on other management considerations. The FY 1984 Force Readiness Report, discussed earlier, provides details of historical and projected MC and FMC rates, by weapon system and by Service. A brief summary of these data is presented in Charts III.G.6, III.G.7, and III.G.8.

Chart III.G.6
Average Aircraft Mission-Capable Rates

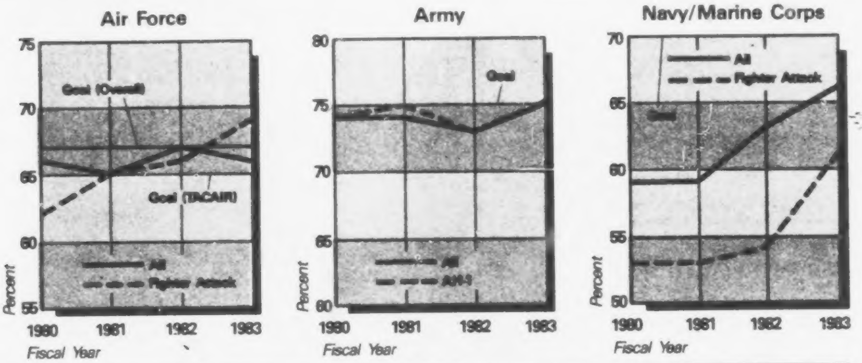


Chart III.G.7
FMC Rates for Ground Forces Equipment

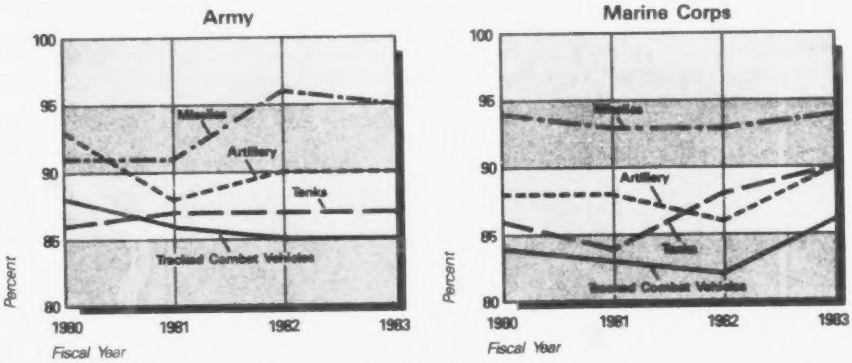
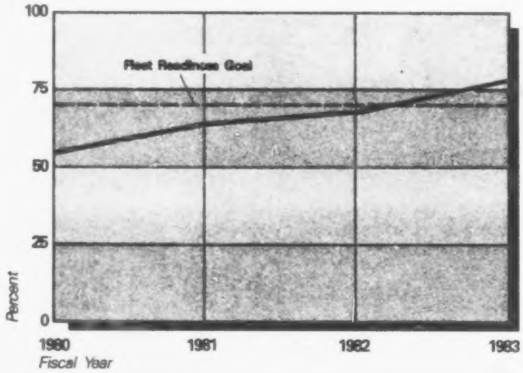


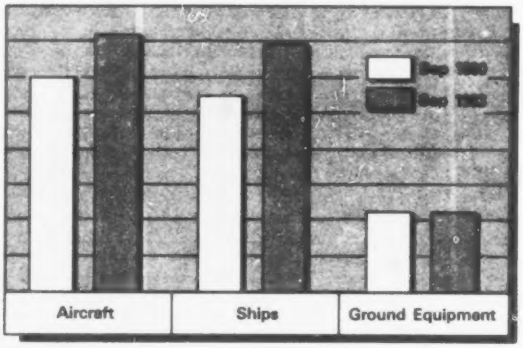
Chart III.G.8
Ship Command Operationally Ready Rates



(2) Unit Combat Readiness Status

The combat readiness status of our aircraft, ground equipment, and ships, as reported through the Unit Status and Identity Report, also reflects the impact of increased spending for readiness resources. Chart III.G.9 illustrates the improvements since September 1980 in the

Chart III.G.9
Equipment Readiness
Combat Ready Units



number of units reporting a combat-ready (C-1 or C-2) status for equipment readiness. Between September 1980 and September 1983, the number of combat-ready units in the force as a whole increased by 20%.

(3) Spares and Repair Parts Inventories

Increased funding for readiness resources has helped rebuild our peacetime inventories of spares and repair parts, which had been depleted in the late 1970s because of long periods of underfunding. Dividends from this investment are apparent in several areas: less reliance on war reserves and cannibalization as a normal source of supply; better stockage effectiveness and customer support at supply depots; and more efficient use of maintenance man hours. For example, the materiel availability of the Navy's aviation and ship units increased from 73% in FY 1981 to more than 75% in FY 1983, while the average waiting time for spare parts dropped from 60 days in FY 1982 to 44 days in FY 1983, a 14% improvement. The monthly average of casualty reports from Navy ships requiring spare parts has declined by almost 10% since FY 1982.

(4) Support for New and Modernized Weapons and Equipment

Unlike the program of the late 1970s, this Administration's defense program reflects a commitment to provide the logistics resources necessary to support a modernized and expanding force structure. During the past three years, we have embarked on an extensive modernization of our conventional forces, enhancing the firepower, tactical mobility, and survivability of our ground combat forces and placing heavy emphasis on upgrading our sea- and land-based tactical air forces. Perhaps the most significant force expansion cente[illegible] the naval forces, where we are increasing the number of carrier [illegible]e groups and attack submarines and modernizing our amphibious fleet. We have also taken major steps to modernize and expand our intertheater mobility capabilities, adding to our airlift and sealift forces and prepositioning more equipment abroad. Similar modernization programs are under way in the strategic offensive and defensive, and C^3I areas.

But this significant force modernization and expansion requires a heavy investment in logistics resources. We have met that challenge. Our investment in initial spares has kept pace with the growing inventory of new and modified equipment. Since FY 1981, we have allocated nearly $11.2 billion for initial spares for new and modified weapon systems and in FY 1985, we have budgeted an additional $4.5 billion. We do not intend to field these systems without the needed logistics support.

(5) Support for Increased Operations and Crew Training

At the same time we were improving the readiness of our weapon systems, replenishing supply inventories, and supporting initial stockage requirements for new and modified weapon systems, support requirements were growing due to the increased tempo of operations and training. Over the past few years, the Air Force has embarked on an urgently needed program to increase the flying hours of its air crews. Similarly, the number of steaming days for general purpose naval units has been growing at an average annual rate of approximately 6% since 1980. The FY 1985 budget for spare parts supports these increased operating tempos, which in turn increase the readiness of our combat forces.

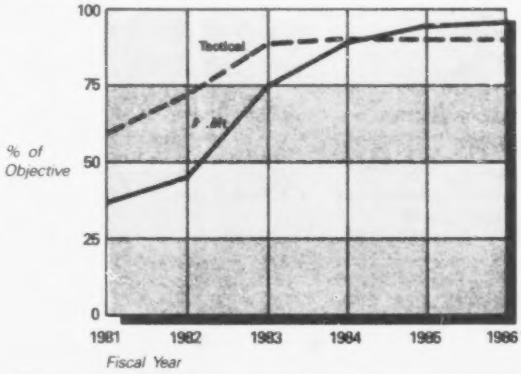
(6) Warfighting Capability

The Reagan defense program has gone a long way toward improving the warfighting capability of our military forces. By the time the items to be procured in FY 1985 are delivered, the war reserve stockpiles of munitions and spares will have increased by about 50% over the level funded in FY 1981. By the end of the FY 1988 funded delivery period, these stockpiles will have increased by another 40-50%.

(a) War Reserve Spares and Repair Parts

The increase in spending for war reserve spares and repair parts has significantly improved the ability of our airlift and tactical fighter aircraft to achieve their planned wartime utilization rates. The capabilities of existing airlift aircraft (C-5s, C-141s, and C-130s) to haul cargo, forces, and equipment in support of our most demanding conflict scenario has almost doubled over the utilization rates we faced in FY 1981. Similar improvements were made in the wartime sortie capability of the Air Force's tactical fighter aircraft. In FY 1981, the sortie capability of the average tactical air unit had declined dangerously because of spares and repair part shortages -- a result of several years of underfunding. As a result of the additional funds we allocated for repair parts purchases in FY 1981-83, the sortie generation capability of the force has improved by more than 50%. The additional funding we are programming for repair parts support for tactical and airlift aircraft in FY 1985-88 will move us toward our sustainability goals by FY 1990. Chart III.G.10 illustrates the improvement in sustainability for the Air Force's airlift and tactical fighter forces from FY 1981-86.

Chart III.G.10
Air Force Tactical and Airlift Forces Sustainability



(b) War Reserve Munitions

Similar sustainability improvements have resulted from our increased investments in war reserve munitions. Since FY 1981, the Services' ordnance inventories have grown substantially. While shortages remain, especially when compared against our long-term inventory objectives, progress is being made in this vitally important area.

g. Support Infrastructure

(1) European Distribution System (EDS)

The Air Force's European Distribution System (EDS) provides for the timely distribution of critical logistics assets needed to return grounded aircraft to service. In wartime, the system would make up to 300 additional fighter aircraft available each day. In FY 1983, we began implementing the EDS. The FY 1985 budget requests funds for the equipment and associated support facilities needed to complete the system.

(2) Deployable Hospitals

Our emphasis on repairing equipment must be matched by an equal effort to achieve an adequate wartime medical capability. The deployable hospitals that the Services have on hand today could provide care for no more than one in five of our wounded in the event of a conventional war in Europe, and for fewer than one in ten wounded in the event of war in Southwest Asia or Korea. The first large procurement of deployable hospitals was funded by the Congress in FY 1983 and FY 1984. The funds requested in FY 1985 will move us significantly closer to achieving an adequate theater medical capability by the end of FY 1991.

(3) Host Nation Support

Host nation support (HNS) is critically important to improving our conventional warfighting capability in Europe, Southwest Asia, East Asia, the Pacific, and Central and South America. HNS is necessary because of the severe shortages we face in combat service support units. These units give our forward-deployed and early reinforcing combat units sustained combat capability. The principle underlying HNS is that our allies can provide needed support from their civil sectors and military establishments at a small fraction of the cost of the United States providing comparable service. Our host nation support arrangements with our European allies are discussed in the NATO section of the chapter on Regional Security. The Republic of Korea and Japan also provide host nation support for U.S. combat forces. All such programs enable us to improve the readiness and deployability of our forces, while reducing costs and manpower requirements for logistics functions that can be provided by host nations.

3. Installations

a. General

Our new "Excellent Installations" program underscores the importance we place on facilities as an essential ingredient of a strong defense. Support for these installations includes maintenance and repair of existing facilities; replacement and modernization of obsolete facilities; construction of new facilities; and compliance with environmental, safety, and occupational health standards.

We have made significant progress in making excellent installations a reality. Our direction is clear -- to construct, manage, maintain, and repair defense installations and provide acceptable working and living conditions for our personnel. Between FY 1981 and FY 1985, funding for military construction and real property maintenance has increased by 30% in real terms. Our job is far from finished, however. Many of our people still work and live in old, crowded, and obsolete buildings. This impairs readiness, lowers morale, and detracts from our efforts to retain valuable personnel.

b. Improving Working and Living Conditions

(1) Military Construction

The FY 1985 military construction program, including family housing, continues our efforts to replace or upgrade deteriorated facilities. Table III.G.4 summarizes our military construction program for FY 1980-85. The shares of military construction in the United States and overseas are depicted in Chart III.G.11. A breakout of the program by type of facility is provided by Chart III.G.12.

Table III.G.4

Military Construction Funding
($ in Millions)

	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
Army	781	987	1,084	2,066	2,545	3,464
Navy	603	827	1,487	1,841	1,880	2,569
Air Force	622	1,049	1,700	2,519	2,512	3,367
Defense Agencies	1,816	2,596	2,829	582	603	922
DoD Total	3,822	5,459	7,100	7,008	7,540	10,322

Chart III.G.11
Military Construction by Geographic Area

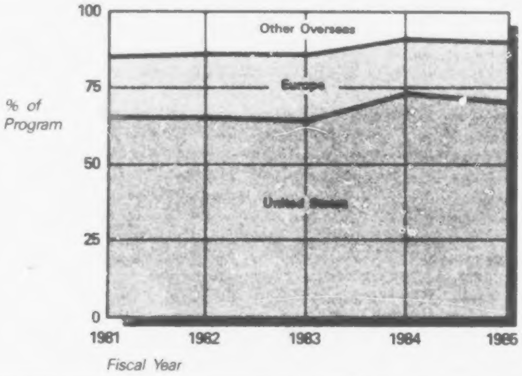
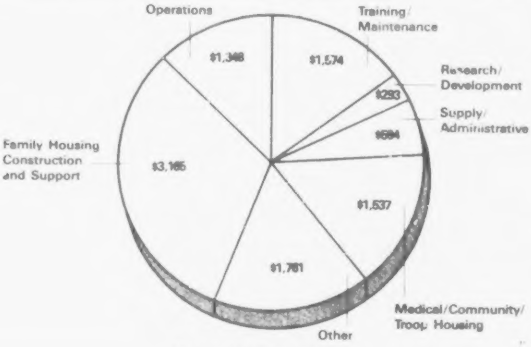


Chart III.G.12
FY 1985 Military Construction Program
(Dollars in Millions)



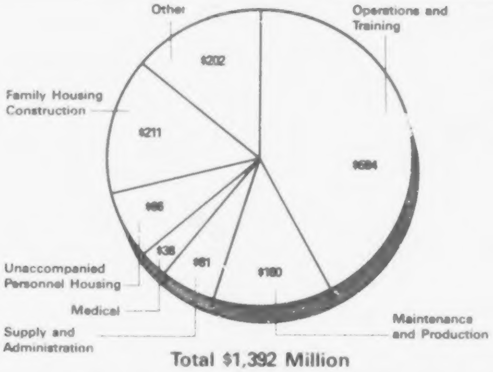
Total $10,322 Million

(a) Europe

Improving the working and living conditions of our troops stationed in Europe remains a high priority of this Administration. We have been able to do this while also providing the facilities needed to support the new weapon systems being deployed there. Many new maintenance facilities, barracks, gymnasiums, and family housing units are either under construction or completed. Troops and their families are no longer relegated to pre-World War II facilities, and they appreciate it. Morale has never been higher, reenlistments are up, and people are now looking forward to a tour in Europe.

The FY 1985 budget includes $1.4 billion for military construction in Europe, as shown in Chart III.G.13. The request includes facilities required for new weapons such as the Ground-Launched Cruise Missile, the Multiple Launch Rocket System, and the Sgt. York gun and Patriot systems. We are also seeking $297 million for the U.S. share of the NATO Infrastructure program. It is our policy to use this multinationally funded program to the maximum extent possible to satisfy our facility requirements.

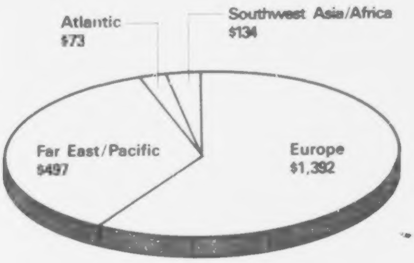
Chart III.G.13
European Military Construction
(Dollars in Millions)



(b) Other Overseas Areas

In addition to the $1.4 billion proposed for military construction in Europe, the FY 1985 budget also includes about $700 million for other overseas areas. Chart III.G.14 shows the distribution of all military construction funding for overseas areas.

Chart III.G.14
Overseas Military Construction
(Dollars in Millions)



Total $2,096 Million

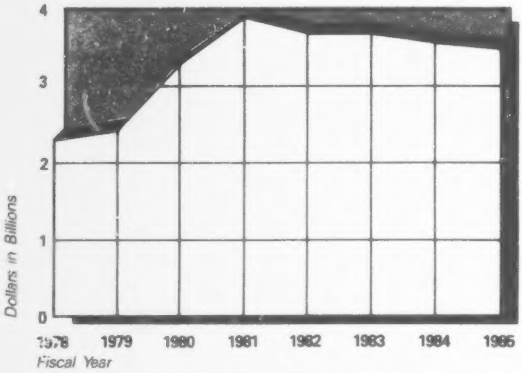
(c) United States

Although our facility support requirements are less severe in the United States than overseas, we must improve working and living conditions, which have become seriously inadequate over the past 10 to 15 years due to underfunding of maintenance, repair, and modernization.

(2) Real Property Maintenance Activities (RPMA)

The RPMA program funds the operation and maintenance of our real property facilities (not including military family housing, which is funded through the Military Construction Program), minor construction, utilities, and other engineering and support services. As an indication of the age and steadily declining condition of our facilities, the backlog of maintenance and repair, as shown in Chart III. G.15, had grown over the past two decades. We turned the tide in FY 1982, and in FY 1985 plan to meet our recurring requirements and further reduce the backlog.

Chart III.G.15
Backlog of Maintenance and Repair



(3) Pollution Abatement

DoD's pollution abatement program continues to set the example for complying with environmental laws. Two major efforts initiated in FY 1984, the Defense Environmental Restoration Program and the Defense Environmental Leadership Project, will work together to solve today's problems while looking for better ways to do the job in the future.

The Defense Environmental Restoration program is a major effort to accelerate the cleanup of hazardous waste and resolve other environmental problems at current and former military installations. The $313 million budgeted for this program in FY 1985 reflects an increase of $163 million over the amount appropriated for FY 1984.

While our restoration program corrects environmental problems using current technology, we are developing improved methods through the Defense Environmental Leadership Project. This project focuses on innovative ways to reduce the costs of compliance and cleanup. For example, we are establishing a program that will, by FY 1986, essentially eliminate the disposal of used solvents as waste at our installations. We are sharing the knowledge we gain from our program with the Environmental Protection Agency (EPA) for nationwide application.

4. Logistics Support Management

a. Supply Programs

We have established a Supply Management Policy Group within DoD to develop logistics management policies and procedures that will allow us to measure supply performance on the basis of weapon system availability. Each DoD component is preparing a comprehensive plan outlining the policies, procedures, and automatic data processing equipment (ADPE) modifications required to implement a weapon-system-oriented supply system. This concept will help us meet our targets for operational availability of weapon systems while keeping inventories of spares at the minimum acceptable level.

b. Maintenance Programs

Maintaining weapon systems and related equipment requires significant resources -- more than $24 billion annually and the efforts of more than 900,000 government and contractor personnel throughout the world.

DoD is continuing to expand the application of Reliability Centered Maintenance (RCM). RCM represents DoD's adaptation of a maintenance strategy developed by the commercial airlines to reduce maintenance expenses and increase operational availability without sacrificing safety or reliability. In general, RCM uses engineering analysis to project the probable time of next failure, thereby extending the time between visits to the repair shop. RCM has been successfully applied to ships, aircraft, engines, and combat vehicles, as well as to various subsystems, avionics systems, and ground support equipment.

c. Transportation and Traffic Management

We have included an extensive review of transportation programs in the Force Projection chapter. The following management initiatives explain important programs not covered there.

The use of competitive negotiations for freight and passenger traffic that is regularly conveyed in large volumes has significantly reduced costs and simplified administration. We are drafting, with the help of industry, a new National Airlift Policy to establish the proper balance between the peacetime use of commercial airlift needed to meet defense emergency requirements and an expanding military fleet of intertheater airlift aircraft. In the sealift area, our policies promote development of the privately owned merchant marine. The DoD operates only those dry cargo ships needed to meet requirements that cannot be satisfied by commercial operators. To manage travel more effectively for DoD personnel, we are expanding the use of commercial reservation and ticketing services, and maximizing the use of discount fares for travel, hotels, and rental cars.

A new unified Military Transportation Command (MTC) will soon be established under the Joint Chiefs of Staff. This new command, with the Army's Military Traffic Management Command as its nucleus, will improve coordination of surface transportation in peacetime and will enhance our ability to deploy combat forces rapidly in wartime. (More than 90% of our transportation requirements in any major conflict must be met by surface systems.) In addition, we have appealed to the Congress for an early repeal of language contained in the FY 1983 Authorization Act prohibiting the consolidation of transportation functions. This would permit us to consolidate certain Military Sealift Command (MSC) responsibilities with like functions in the MTC to achieve additional efficiencies.

d. Integrated Logistics Support

Comprehensive logistics support planning during the systems acquisition and post-production phases will improve the readiness of our weapon systems. Our increased emphasis in this area includes designing new systems with readiness requirements in mind, increasing the visibility of initial logistics support resources in POM and budget submissions, and establishing a new R&D program in which we are studying how new technology can be used to solve weapons support and other logistics problems.

e. Energy Conservation

DoD actively supports the National Energy Conservation Policy Act, which requires that energy-saving modifications be made to existing facilities when cost-effective. A major benefit of permanent modifications is long-term savings in energy costs.

Since FY 1976, the Congress has appropriated more than $1 billion for this program. To date, we have saved over $1 billion from this investment, and project a $200 million annual cost avoidance in the years ahead. The $160 million we are proposing to invest in energy-conservation measures in FY 1985 will result in an additional annual cost avoidance of approximately $40 million. Nonetheless, energy consumption has increased slightly in the past few years due to a significantly higher operational tempo. The increase would have been much greater, however, without energy conservation measures. The best illustration of improved energy efficiency in DoD is the steadily decreasing consumption of energy as a percentage of operation and maintenance costs in constant dollars. Compared to FY 1975, this ratio was 20% lower during FY 1981 and 29% lower in FY 1982.

f. Productivity Enhancement

DoD fosters a wide range of programs to improve productivity. Beginning in 1983, we purchased modern labor-saving equipment through the industrial fund to reduce the cost of repair by modernizing our depot maintenance equipment. In other areas, we financed capital equipment and facilities to improve the productivity of support operations. One of these investments, LOGMARS, employing state-of-the-art, machine-readable symbology (or bar-coding), is expected to return almost $17 in supply, maintenance, and base operations costs for each dollar invested over its economic life. The LOGMARS program will save DoD $8 million in FY 1984, with projected savings of $112 million during FY 1984-88.

5. Conclusion

The emphasis we have placed since FY 1981 on materiel readiness and sustainability has improved significantly the combat capability and real deterrent strength of our forces. Readiness rates are climbing, our ability to sustain our forces during a prolonged conflict has improved, and our program for "Excellent Installations" is becoming a reality. While we continue to make progress, we still have not reached our goals in several areas. Some readiness deficiencies remain, and several sustainability requirements will not be fully funded until FY 1987-89. This does not mean we have lessened our resolve to build a strong and effective logistics support posture. Rather, it reflects the difficulty of coping with increasingly complex support requirements, while pursuing high standards in both capability and efficiency.

H. MOBILIZATION

1. Introduction

For many years, mobilization planning and preparedness did not receive a great deal of attention. When this Administration took office, we discovered that plans and procedures were 20 years out-of-date and that we had major shortfalls in mobilization manpower and materiel. This situation contributed to the difficulties that the United States faced in fulfilling its role as leader of the free world.

The capability of the United States to mobilize its vast resources in support of the armed forces contributes to the effectiveness of our deterrence policy. The Reagan Administration has undertaken numerous initiatives to improve that capability. This chapter addresses those aspects of that capability that are enhanced by better planning and by having tested procedures in place. The small commitment of resources to these planning and exercise activities has a potentially large pay-off in preparedness for an actual mobilization.

2. Federal Mobilization Initiatives

a. Presidential Emphasis

From the outset of his Administration, President Reagan has emphasized his personal commitment to improving America's mobilization preparedness. In July 1982, he signed a new National Security Decision Directive, NSDD 47, on emergency mobilization preparedness. The Directive is amplified by hundreds of specific planning initiatives and has received continued presidential support.

> ***"It is the policy of the United States to develop systems and plans that will ensure that sufficient manpower and materiel are available to guarantee the nation's ability to mobilize. . ."***
>
> ***— NSDD 47***

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b. Emergency Mobilization Preparedness Board (EMPB)

The President established the EMPB to develop a credible and effective capability to harness America's mobilization potential. The Board is chaired by his Assistant for National Security Affairs and includes deputy cabinet-level representatives from all major federal agencies having mobilization preparedness responsibilities. It oversees progress on the planning initiatives and is charged with establishing national policy in the mobilization area. The Department of Defense actively participates in all of the Board's working groups and chairs the two discussed below.

The Military Mobilization Working Group (MMWG) is chaired by the Assistant Secretary of Defense for Manpower, Installations, and Logistics and includes members from 10 other federal agencies. The MMWG has already:

-- Developed the basic mobilization scenarios to be used for planning by all federal departments and agencies; and

-- Prepared and staffed standby legislation for drafting health professionals into the military, should the number of volunteers in a crisis not be adequate.

To complement the mobilization plans and procedures that are continually under development and review in DoD, the MMWG is developing a number of plans to ensure the availability of resources controlled by other federal agencies. The Working Group is developing deployment support plans and estimating requirements for interagency support for deployment of military forces. In addition, the MMWG is working on an improved system for military support to civil authorities so that all appropriate agencies will be aware of how to request support and what kinds of support they may be able to secure from DoD in either a national security crisis or a domestic emergency.

The Emergency Communications Working Group (ECWG) was established to ensure that communications resources are available and adequate to respond to the nation's needs across a broad spectrum of emergency mobilization situations. Because emergency communications cut across many functional areas, the ECWG comprises representatives from 18 federal agencies, departments, and offices. In addition to its work in the communications arena, the ECWG identified three broader issues that have been integrated into the EMPB effort: the nation's dependence on Automated Information Processing (AIP) in times of crisis and the need for survivability of critical AIP; the need to enhance the availability of scientific, engineering, technical, and other human resources in support of both military and industrial mobilization needs; and the need for reliable electric power during and following a major natural disaster or nuclear war.

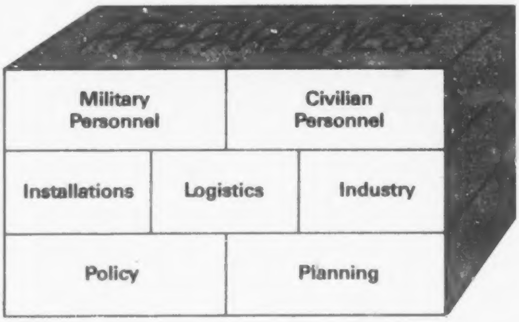
3. DoD Mobilization Initiatives

a. Planning and Policy

Our initial emphasis has been on improving planning and reestablishing emergency mobilization preparedness as both a policy and a fact in DoD. We have ensured that strategy and resource guidance emphasizes the need for conventional mobilization preparedness and, for the first time, we have involved the Joint Chiefs of Staff, the Unified and Specified Commands, the Military Services, the Defense Agencies, and the OSD staff collectively in its development.

Our improved mobilization planning was highlighted by the publication of the DoD Master Mobilization Plan (MMP) in June 1982. The MMP provides broad planning guidance for DoD, a framework for decision-making, and specific responsibilities and tasks. Recent exercises have shown the need to refine and update the MMP, and we have begun doing

Chart III.H.1
Building Blocks of Mobilization Preparedness



so. We also intend to add sections on exercise guidance and information planning, as well as a glossary.

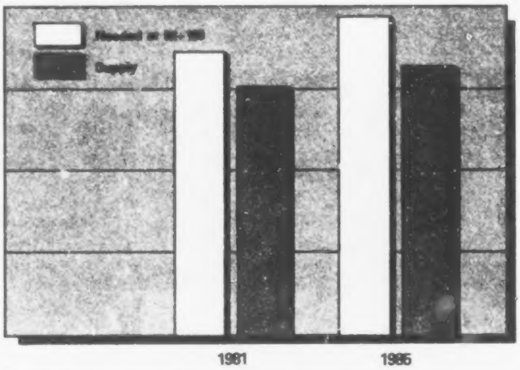
We have revitalized the existing Mobilization and Deployment Steering Group as a mechanism for developing mobilization policy guidance and for resolving major mobilization issues. Chaired by the Under Secretary of Defense for Policy, this Steering Group meets monthly and ensures continued senior-level attention to mobilization matters. In response to its impetus, preparation of an up-to-date program-budget structure for full mobilization is under way.

Concurrently with the invigoration of emergency mobilization preparedness policies and planning, we have made significant strides in developing the capability for OSD to perform effectively in its crisis or wartime role. An OSD Crisis Management System (CMS) has been established and tested in three major exercises. This system permits rapid action on issues, provides OSD principals with the information essential to informed decisionmaking, and helps resolve issues at the lowest appropriate levels. This focuses the Secretary of Defense's attention on those matters requiring his personal decision or a recommendation to the President. OSD has been increasingly active in planning, organizing, and participating in major mobilization and crisis-response exercises. In addition to training the OSD staff in its crisis-related functions, this participation has improved the overall effectiveness of the JCS-sponsored exercise program.

The responsiveness of the nation's industrial base will directly influence our capability to sustain our armed forces in a crisis. To increase this responsiveness, we established an industrial task force, headed by a former chief executive officer from a major defense industrial firm, to develop and oversee policies and plans for industrial surge and mobilization. Some other initiatives taken to improve responsiveness include: improved planning and programming for industrial base actions; production surge analyses and investments for reduction of lead times for critical items; Defense Production Act Title III investments to improve domestic manufacturing capability; and DoD Manufacturing-Technology Program investments. These initiatives are covered in more detail in the Industrial Base chapter.

b. Manpower Initiatives

Chart III.H.2
Military Manpower for Mobilization



We have made substantial improvements in manpower preparedness. Previous mobilization manpower planning assumed a NATO-only conflict. In view of the uncertainties of the present international situation, our planning now takes into account the possibility of a multitheater war. This has increased our requirements for wartime military manpower. At the same time, we have successfully increased our potential supply of active, reserve, and pretrained military manpower, thus avoiding an aggravation of our actual shortfall. We have also done a better job of identifying wartime needs for additional civilian employees, particularly with regard to their occupations and employment locations.

Initial wartime demands for military manpower would be filled by active and reserve forces. Since these forces alone cannot meet the total requirement, the Department of Defense also relies on pretrained individual manpower. The Individual Ready Reserve (IRR) and retired military personnel subject to recall constitute the largest part of the pretrained manpower pool. Current estimates of the number of people in these categories available for mobilization indicate that there will be significant manpower shortfalls in wartime, especially in critical skill areas.

As a result of a number of legislative and policy initiatives, IRR strength has grown from a low point of 356,000 in 1978 to 417,000 by the end of FY 1983. Any further significant strength increases will require retaining members for longer periods and providing new sources of entry.

The Military Manpower Task Force recognized the need to increase the mobilization manpower pool and recommended that the Congress authorize longer service obligations. Also, as an interim measure, it recommended incentives to increase current IRR strengths. The Congress approved the Department's request to authorize the Secretary of Defense to extend the military service obligation from not less than six to no more than eight years and to resume IRR bonuses. We are now working on related issues such as preventing military skill atrophy and increasing proficiency training programs for members of the IRR.

A major achievement with respect to retired members was also passed by the Congress. This change authorizes ordering to active duty members of the Retired Reserve who have completed at least 20 years of active service on the same basis as retired members of the Regular Components of the Services.

The Congress also provided the President emergency authority to suspend certain laws relating to promotion, retirement, and separation. This authority, normally referred to as "stop-loss" authority, allows the retention on active duty of personnel who might otherwise be released or retired until the President determines the need for their services no longer exists.

To ensure the rapid notification of individual Reserve members and military retirees in the event of mobilization, the Department will use "mailgrams" consisting of an order to active duty and an emergency travel warrant. The travel warrant has been standardized to expedite processing by commercial carriers. We plan a full technical analysis of the mailgram system to determine its surge capacity in the early days of a mobilization. Backup systems such as computer-generated mail and direct mail are being improved.

Chart III.H.3
Congressional Support of Mobilization Manpower Preparedness

- Military Service Obligation Extension
- Stop-Loss Authority
- Reserve Retiree Recall

Since 1980, the Wartime Manpower Planning System (WARMAPS) has become an important source of wartime manpower demand and supply planning data. We have expanded WARMAPS to include additional military occupational categories. In this way, our plans can be based on a more realistic estimate of supply that recognizes, for example, that cooks cannot satisfy a demand for mechanics. The Services are also developing automated support capabilities for WARMAPS so that increased emphasis can be placed on trying to fix wartime shortfalls and skill imbalances. In addition, we have expanded WARMAPS coverage to DoD civilian employees. With this data, we can make plans in peacetime to fill our expanded wartime civilian hiring needs.

During the Proud Saber exercise in late 1982, DoD tested, for the first time in many years, procedures for mobilizing its civilian work force. We are now addressing several problems revealed by that test. Our chief difficulty clearly will be recruiting additional workers, particularly those in skilled blue-collar occupations, such as machinists. We are working with a national employers' association as well as with labor unions to plan how to recruit the additional skilled manpower necessary to provide expanded support during a mobilization. We also plan to survey DoD civilian retirees about their willingness to return to work during a national crisis.

The exercise also revealed that the Department of Labor's national network of Job Service Offices would be handicapped in helping us in mobilization recruitment because DoD and these offices use different occupational codes. We are developing a "crosswalk" between the two coding systems so that DoD installations can request workers using the codes employed by the Job Service.

As discussed in the Manpower chapter, we plan to hire in peacetime additional base-support civilians to reduce our military presence overseas. These people will continue to work for us in the same or similar jobs under host-nation support agreements in wartime, thus giving us increased military manpower flexibility.

Previous mobilization exercises also identified problems and unresolved issues associated with the management of the emergency flow of manpower into the Military Services. The Manpower Accession Policy Steering Committee assumed responsibility for this management task. It also makes recommendations on volunteer policy and procedures; quality control and allocation of inductees among the Services; and standards for enlistment and induction. Specific issues currently being addressed include allocation of conscientious objectors, quality distribution of manpower among the Services, and industrial deferments.

In addition, we have worked with the Selective Service System to enhance its ability to provide draftees quickly. Selective Service has recently attained high registration compliance rates.

Under the sponsorship of the Mobilization and Deployment Steering Group, we have begun planning for an expansion beyond the current size of our military forces should the crisis situation call for it. We have made a first cut at defining the constraints associated with a major force expansion in terms of time, materiel, and manpower. We are continuing to refine and enlarge our analysis and plan to work with other federal agencies through the EMPB structure.

c. Logistics and Installations Initiatives

The mobilization exercises conducted in the past did not adequately test DoD's logistics system. Consequently, we incorporated events into the scenario for Exercise Proud Saber designed to stress

DoD's complete logistics infrastructure and we arranged for an independent assessment of this aspect of the exercise.

The evaluation identified a number of unsuspected shortcomings. This led us to create a Mobilization Materiel Management Task Force (MMMTF) to address deficiencies in the Master Mobilization Plan and the Crisis Management Structure. While the MMMTF has not completed its work, actions to implement many of its recommendations are already under way.

An adequate supply of petroleum is critical to successful mobilization. DoD initiatives in this area include an analysis of the senior-level decisionmaking process for meeting mobilization energy requirements, delineation of decision options and alternatives, and development of specific petroleum energy supply procedures under disrupted conditions. FUELEX 84 -- a political/military simulation of a petroleum supply disruption -- is projected for spring of this year. The exercise will permit DoD and the Department of Energy (DOE) to test current procedures. DoD, with DOE, has almost finished the Federal Energy Resource Claimancy Manual, which implements the provisions of the Defense Production Act for mobilization-related petroleum requirements.

We have been working to enhance the military utility of the U.S.-flag merchant fleet. Pursuant to a recent Navy-Maritime Administration (MARAD) agreement, the Navy has accepted responsibility for funding selected sealift support enhancement features to be installed in merchant ships upon mobilization, while MARAD will pursue the incorporation of fixed defense features in merchant ships under construction as well as those undergoing conversion or major overhaul. Additionally, in coordination with the Department of Transportation, we are continuing to survey the readiness of the National Defense Reserve Fleet in terms of manpower and materiel requirements, logistical support, and shipyard capabilities.

During the past year, DoD's transportation mobilization preparedness posture has significantly improved as a result of Contingency Response (CORE) Program enhancements. The CORE Program provides DoD transportation service support and priority prior to and during contingencies and emergencies. CORE quick-reaction procedures significantly reduce the time required to muster the various transportation assets needed to meet DoD priority requirements. The National Level Program, which is structured around a CORE team made up of key members from DoD, other federal agencies, and the transportation industry, is a prime example of the application of the current Administration's "Mobilization Preparedness: Government-Private Sector Partnership" theme inherent in NSDD 47. This CORE-team concept has been expanded to the Military Traffic Management Command's area commands and ocean ports throughout the world. The expansion of the program's CORE-team concept to regional and local levels enhances mobilization planning significantly by bringing more private-sector industry personnel into the process. To ensure operational preparedness, team members are assembled periodically to participate in and support mobilization CORE workshops, command-post exercises, and field training exercises.

Much effort has been devoted to planning the timely acquisition of facilities needed during a mobilization. As a result of a DoD-industry-labor construction mobilization conference, DoD developed a plan to: (1) identify mobilization facilities required; (2) develop facility acquisition schedules; (3) pre-design and construct facilities that cannot be completed during a mobilization period; and (4) work with FEMA to examine all mobilization construction requirements (including those in private industry, civil defense, and DoD) to ensure that the capability and resources will be available to accomplish the construction. The early steps in this process have been taken. Construction requirements have been identified for a full mobilization, and acquisition schedules have been reviewed. As a result, the Army Corps of Engineers and the Naval Facilities Engineering Command are now developing standard designs for selected mobilization facilities.

4. Conclusion

Our planning and policymaking activities have set the stage for the improvements we seek in mobilization preparedness. We will continue to build on the work already accomplished, particularly in regard to refining our estimates of required resources and working to ensure that they are made available in time of need.

I. SPECIAL INTEREST PROGRAMS

1. Command, Control, Communications, and Intelligence (C^3I)

a. Introduction

Our weapon systems and forces can be used effectively only if we have a means to communicate with and direct them. Command, control, communications, and intelligence systems give us that capability. Broadly speaking, the C^3I system comprises a network of command centers, sensors, computers, communications links, and other supporting systems. These systems serve our civilian and military commanders in a number of ways: they assist decisionmakers in gathering and evaluating intelligence information on enemy forces; they enable commanders to assess the status and disposition of friendly forces; they provide communications links over which orders and information can be transmitted; and they give our leaders a means of redirecting their forces as necessary in response to changing conditions.

Given the central role they play in our overall defense strategy, we seek to ensure that our C^3I systems are as survivable, endurable, and effective as the weapons they support. We cannot afford to let C^3I become the weak link in the force structure. Interoperability of C^3I systems among the Services and between U.S. and allied forces is another key consideration. The FY 1985-89 C^3I program will give us the ability to respond to ambiguous warning or sudden attack and to manage our forces over the course of a conflict -- a key factor in our commitment to the defensive use of military power.

b. FY 1985-89 Programs

For purposes of this discussion, C^3I programs are grouped into five broad areas, shown in Chart III.I.1. At the top of the chart are

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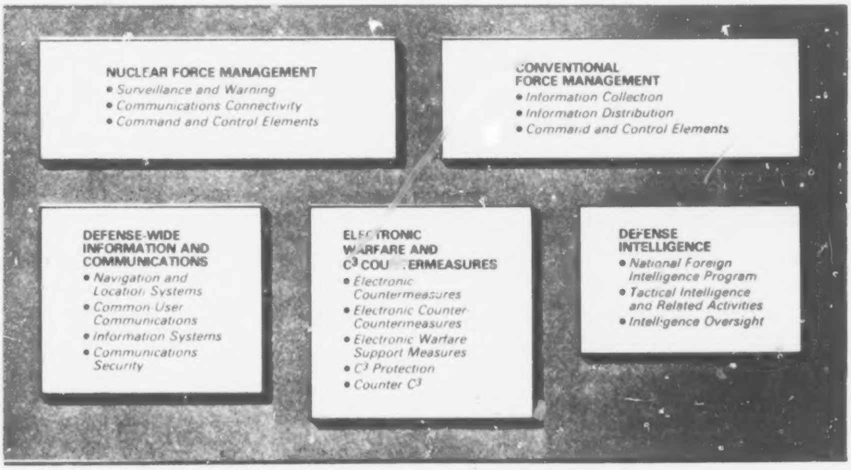
Chart III.I.1

C^3I Mission Area Structure


NUCLEAR FORCE MANAGEMENT
• Surveillance and Warning
• Communications Connectivity
• Command and Control Elements
CONVENTIONAL FORCE MANAGEMENT
• Information Collection
• Information Distribution
• Command and Control Elements
DEFENSE-WIDE INFORMATION AND COMMUNICATIONS
• Navigation and Location Systems
• Common User Communications
• Information Systems
• Communications Security
ELECTRONIC WARFARE AND C3 COUNTERMEASURES
• Electronic Countermeasures
• Electronic Counter-Countermeasures
• Electronic Warfare Support Measures
• C3 Protection
• Counter C3
DEFENSE INTELLIGENCE
• National Foreign Intelligence Program
• Tactical Intelligence and Related Activities
• Intelligence Oversight

those functions that are performed in direct support of nuclear and conventional forces. Programs related to the areas on the bottom of the chart are more general in nature and support the entire force structure.

The FY 1985 program includes approximately \$36 billion for C^3I programs. The following sections describe major efforts in each area, with particular emphasis on initiatives that support cross-mission or cross-Service needs.

(1) Nuclear Force Management

The President's strategic modernization program is designed to redress the imbalance between U.S. and Soviet nuclear forces. The C^3 portion of the program emphasizes the areas of surveillance and warning, connectivity, and command and control. The Nuclear Forces chapter provides details on these efforts.

(2) Conventional Force Management

The five-year program also gives high priority to enhancing C^3I support for conventional forces. The program focuses on improvements in three broad areas: information collection, information distribution, and command and control. Programs in those areas are discussed in the Land, Naval, Tactical Air, and Projection Forces chapters.

(3) Electronic Warfare (EW) and C^3 Countermeasures

Electronic warfare involves the use of electronic measures to deny or impair the enemy use of his weapons and command and control systems. C^3 countermeasures involve the application of similar techniques coupled with offensive weapons to disrupt or destroy enemy systems that might be used against our command and control network. We are making progress in developing EW equipment to counter the Soviet threat, which continues to grow both in numbers of systems and in the level of its technological sophistication.

The FY 1985-89 program will improve the EW capabilities of our air, naval, and land forces. For aircraft and ships, EW principally involves the use of electronic countermeasures (ECM) to warn of an impending attack. Warning systems are especially critical, since they provide the information needed to select the appropriate response, such as evading, jamming, or destroying enemy systems. They also provide protection by degrading enemy early warning and ground control intercept sensors. In high-threat areas, the ECM equipment carried onboard our ships and aircraft is complemented by additional systems. The two primary support aircraft used for this purpose are the EA-6B, flown by the Navy and Marine Corps, and the EF-111A, operated by the Air Force. Both systems are now operational, with improvements planned to maintain their effectiveness through the 1990s. EW improvements for land forces focus on locating and jamming enemy weapons and command and control systems. Principal programs in this area include truck- and track-mounted systems, a small expendable jammer, and the EH-60 helicopter.

(4) Defense-wide Communications and Information Systems

Defense-wide systems support nuclear as well as conventional force management. The five-year program pursues improvements in four broad areas: navigation, communications, information systems, and computer and communications security.

(a) Navigation and Location

The worldwide operation of our forces in peacetime or during a conflict requires accurate navigation and location information. The principal program to improve our capabilities in this area is the NAVSTAR Global Positioning System (GPS). This space-based system will provide our forces with highly accurate position, velocity, and timing information on a continuous basis. During FY 1983, we awarded a multiyear contract to procure GPS satellites and began ground terminal testing. Deployment of the full 18-satellite network will be completed by FY 1988, thereby providing us a worldwide three-dimensional capability.

(b) Common-User Communications

The Defense Communication System (DCS), consisting of both government and commercial facilities, provides global telecommunications service to the Department of Defense. Our goal is to make the DCS more useful under wartime conditions, while reducing current operating costs. In this regard, we have completed the plan for an improved system and are pursuing the major programs discussed below.

Defense Switched Network -- The existing AUTOVON and other telephone systems will gradually be converted into a new system called the Defense Switched Network (DSN). The DSN will be more survivable than the obsolete, manpower-intensive facilities it will replace, while also offering more flexible and responsive service. We are placing special emphasis on providing timely and reliable secure telecommunication service to key command and control facilities.

Defense Data Network -- Under the Defense Data Network (DDN) program, we will replace the Worldwide Military Command and Control System (WWMCCS) Intercomputer Network hardware with improved data communications switches, thereby achieving an eight-fold increase in the system's capacity. These improvements will make the network fully responsive to the National Command Authorities (NCA) in a crisis. Additional network components have been installed in Korea and Hawaii, and the European testbed network is nearing completion. DDN also includes strengthened access controls to prevent unauthorized use.

Secure Voice Improvement Program -- The Secure Voice Improvement Program (SVIP) will substantially expand DoD's secure voice communications capability over the next several years. The system will share equipment and facilities with the Federal Secure Telephone System and will be interoperable with other DoD and civilian networks.

Automatic Digital Network (AUTODIN) Modernization -- The 20-year-old AUTODIN continues to be DoD's primary system for transmitting secure messages. Types of message traffic the system handles include command, control, intelligence, logistics, and administrative communications. To ensure its continued reliability and responsiveness, we have begun a modernization program for the system.

(c) Information Systems

National Command Authorities and subordinate command echelons require data processing and display systems to give them information on the status and location of their forces, and on the availability of support materiel and facilities. WWMCCS provides this capability.

The WWMCCS Information System (WIS) program includes near-term enhancements for WMMCCS Automatic Data Processing (ADP) computers and facilities, and provides for an extensive and evolutionary modernization of the total system. The FY 1985 budget includes funds for the continued modernization of the current WWMCCS standard ADP hardware and software. The NORAD - Cheyenne Mountain Complex ADP equipment is being modernized to satisfy C^3I requirements unique to operations in space.

(d) Computer and Communications Security

Computer and communications security programs are designed to ensure that our computer assets cannot be disrupted or used by anyone not properly authorized. To prevent these problems, we have defined technical criteria for inclusion in our design specifications. We are also continuing our effort to deny illegal access to security-related information by providing additional communications security devices on telecommunications systems.

(5) Intelligence Programs

Defense Department intelligence programs obtain military information on foreign activities and furnish it to national, departmental, and tactical users. Signals intelligence, photography, and other technical collection capabilities allow decisionmakers to respond to near-term military, diplomatic, and economic developments in foreign countries. In addition, information about foreign weapons and tactics enable weapon designers, planners, and operators to develop countermeasures, improve equipment, and adjust battle plans. Except for tactical intelligence activities in lower-echelon units of operational forces, which are fully integrated with their units, all DoD intelligence activities are accounted for in one of two aggregations: the National Foreign Intelligence Program (NFIP) or Tactical Intelligence and Related Activities (TIARA).

As directed by the President, the Director of Central Intelligence provides program guidance and develops the NFIP budget. Most of the peacetime intelligence activities of the Defense Department are included in the NFIP. TIARA programs, on the other hand, are managed by the Services and the Defense Agencies to respond to operational commanders' requirements to gather and interpret time-sensitive intelligence. To ensure greater recognition of cross-program considerations, TIARA programs are under the cognizance of the Assistant Deputy Under Secretary of Defense (Intelligence).

Independent oversight of all DoD intelligence and counterintelligence activities is accomplished by the Assistant to the Secretary of Defense (Intelligence Oversight). His office ensures compliance with Executive Order 12333, and governs reports on such matters to the Secretary of Defense and the President's Intelligence Oversight Board.

c. Conclusion

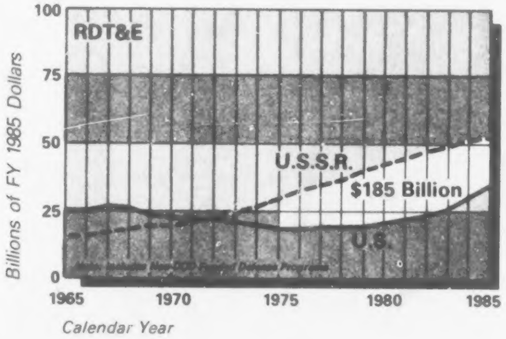
During the past year, we have made substantial progress in providing all echelons of our command structure with more reliable, more survivable, and more effective force management capabilities. We have used evolutionary development to meet our immediate requirements, while structuring long-term programs to overcome weaknesses in current systems, most of which were designed to satisfy peacetime only requirements.

2. Research, Development, Test, and Evaluation (RDT&E)

RDT&E programs lay the groundwork that allows us to field affordable and reliable weapons and support equipment capable of meeting the threat today and in the future. Today, this challenge is especially great since our potential adversaries have continued to improve their combat capability in essentially every mission area.

Since 1971, annual Soviet RDT&E investments, measured in U.S. dollar equivalents, have far exceeded U.S. RDT&E expenditures (see Chart III.I.2). Over the past ten years, the cost of Soviet R&D activities has exceeded the cost of U.S. activities by $185 billion in real terms. As a result, we are now in the position of having to increase our investment in R&D activities to ensure our ability to meet the future threat. Our goal is not to match Soviet R&D spending, but the great disparity between our levels of effort is indicative of the challenge we face.

Chart III.I.2
Military RDT&E Comparison



Since we cannot match our opponents man for man or system for system, our focus is on maintaining our forces' technological edge -- and on using it to our best advantage. For example, technologies are in hand that can increase the capability and effectiveness of our conventional forces to such a degree that we may be able to reduce significantly our reliance on nonstrategic nuclear weapons.

In the past, we emphasized improving the performance of individual weapon systems. We are now focusing on improving our capability across total mission areas. In this way, technology offers new opportunities for substantially increasing the combined effectiveness of our forces. Consequently, our RDT&E programs are now designed to relate to our overall management approach -- they support our strategy in an integrated fashion.

The objectives and status of RDT&E activities in the strategic, tactical, chemical, and C^3I mission areas are discussed in detail in the appropriate sections of this report. Therefore, we will describe here the cross-cutting mission areas of science and technology, nuclear weapons development, test and evaluation, space, the strategic defensive initiative, and international cooperative programs.

a. Science and Technology (S&T) Program

The Science and Technology program provides the technological foundation for maintaining military forces that are capable not only of deterring conflict, but also of bringing armed conflict to a successful conclusion if such circumstances arise. This investment in the future is necessary if we are to have the means to maintain strong and effective forces for national security.

(1) Objectives

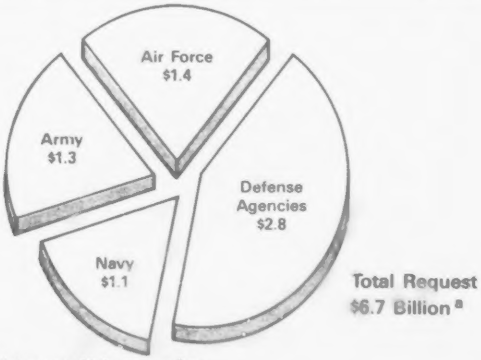
The Soviets have made substantial investments in military research and development. As a result, the technological quality of their systems has moved substantially closer to that of our own. This qualitative advance, coupled with their overwhelming numerical superiority, underscores our need to rely on technology as a counterpoint to numbers. The primary goal of the S&T program is to ensure that the United States maintains a significant technological lead over its principal adversaries. We must undertake this task aggressively during relatively peaceful times, recognizing how much more difficult it would be during periods of world tension.

DoD's S&T program consists of three components: research, exploratory development, and advanced technology development. The program, however, represents only a few of the steps we and our allies must take to maintain the technological superiority of our military forces. We must, for example, interact closely with the private sector. In an era when technological leadership plays such a vital role in our national security and economic well-being, only by making use of the broad combination of talent and know-how in both government and private industry can we meet our technology needs.

(2) Programs

The S&T program encompasses a broad spectrum of projects in all the technical disciplines of interest to DoD. The projects range from laboratory research to technology demonstrations in realistic operational environments. The Services manage approximately 58% of the programs, with the Defense Agencies administering the rest (see Chart III.I.3).

Chart III.1.3
FY 1985 Science and Technology Program
(Dollars in Billions)



[a] Total does not add due to rounding.

The following paragraphs present highlights of the S&T program for FY 1985-89.

(a) Very-High-Speed Integrated Circuit (VHSIC)

Under the VHSIC program we have made significant progress in developing prototype microchips that will greatly increase the signal-processing capability of military equipment. During the past year, for example, we developed and demonstrated 1.25 micrometer circuitry that will provide the basis for new generations of equipment. Several systems have been selected by each Service for demonstrating the application of this technology. Our goal is to incorporate VHSIC circuit technology into defense systems at the earliest possible stage, thereby reducing the time between the development of a technology and its application in deployed systems.

(b) Software Technology for Adaptable Reliable Systems (STARS)

The STARS program will improve our ability to develop and support software for mission-critical systems. This tri-Service effort, built upon the solid foundation of the successful Ada (DoD's high-order computer language) program, will address critical problems in the cost, transportability, reliability, and survivability of computer software in weapon systems.

(c) Advanced Materials Program

The Advanced Materials Program continues to provide high payoffs by reducing the weight and improving the performance of weapon systems, while conserving strategic materiels through the application of carbon/carbon composites and metal-matrix composites. We are demonstrating the use of such composites in turbine engines, shipboard antennas, tank-tread components, long-life submarine batteries, aircraft wings, and helicopter transmission cases. In FY 1985, we will begin a program using metal-matrix composites both to develop large space structures and to enhance the survivability of spacecraft.

(d) Modern Technology Demonstration Engine

The Modern Technology Demonstration Engine Program is proceeding on schedule. This program is expected to reduce fuel consumption by 20-25% compared with similar engines currently in use. The application of this advanced engine technology to turboshaft (JVX, CH-47), and turboprop (P-3 and C-130) aircraft could offer large payoffs.

(e) Chemical Defense Program

We continue to place emphasis on developing new technologies for defending against chemical weapons. During the past year, a new nerve gas antidote has been fielded. Also, an area chemical agent alarm has transitioned to the advanced technology development phase, and a water test kit will be fielded in FY 1985. We will continue RDT&E efforts in the medical and detection areas and expand the decontamination program.

(f) University Research

University research is an important component of DoD's S&T program. We have established a DoD-University Forum to help resolve problems and discuss cooperative initiatives. Over the past year, the forum has been helpful in ensuring both that academic institutions are provided the information they need to carry out their research programs and, that information that might compromise our national security is protected. We remain committed to improving the research capability of the nation's universities. Our emphasis in this area is on continuing the growth in funding for basic research and on upgrading the instrumentation used in university research.

(g) Environmental Science and Services

The organizations involved in environmental sciences (geophysics) and services (military meteorological and oceanographic support) continue to emphasize the development of advanced techniques to support our latest weapon systems. Efforts to upgrade tactical support capabilities include a new hand-held, eye-safe laser radar that will accurately measure visibility and cloud cover; the shipboard Tactical Environment Support System, which will integrate environmental support for antisubmarine warfare and all other naval tactical operations; and under the Defense Meteorological Satellite Program, improvements to the satellites' survivability and tactical readout capability. Also, the Next-Generation Weather Radar program, being conducted jointly by the Departments of Defense, Commerce, and Transportation, has moved into the validation phase, and a joint U.S.-Canadian program to develop an Automated Weather Distribution System is under way.

b. The Defense Advanced Research Projects Agency (DARPA)

DARPA is DoD's central research organization. Its focus is on "high-risk/high-payoff" projects that are generally long-range and multi-Service in nature. As technology areas mature, the agency conducts feasibility demonstrations in conjunction with the Services, who then can move the technology rapidly through the development process. DARPA's research programs cover a broad spectrum of technologies; some of its major efforts are discussed below.

(1) Directed-Energy Technology

DARPA's research in the area of directed-energy technology, described below, constitutes a major portion of DoD's directed-energy program.

(2) Strategic Computing

During FY 1984, DARPA began an important program in strategic computing, which will expand significantly in FY 1985. By seizing the opportunity to leverage recent advances in artifical intelligence, computer science, and microelectronics, DARPA plans to create a new generation of "machine intelligence technology" for application in defense programs, such as autonomous vehicles, battle management systems, and a "pilot's associate" (an advanced information summary and display system). Advances in "expert system" technology will allow us to mechanize human knowledge and reasoning processes. Machine vision, speech, and understanding of natural language simplify human interaction with computers, offer new alternatives for designing computers, and allow the multiple computations to be processed in parallel, leading to large improvements in machine performance.

(3) Gallium Arsenide Circuits

The survivability of electronic equipment in hostile environments will be enhanced by advances in radiation-hardened gallium arsenide circuits. Gallium arsenide technology has progressed beyond the laboratory stage to a pilot line fabrication facility that produces up to 100 wafers per week. This technology has important potential applications for space-based systems.

c. Directed-Energy Technology Program

DoD's directed-energy technology program is a coordinated effort among the three Services and DARPA to develop high-energy laser, particle-beam, and high-power microwave technology for application in a variety of missions.

One of the more important elements in the program is the Strategic Laser System Technology initiative. This effort focuses on high-energy laser and particle-beam research, which provides the foundation for implementing both space-based and ground-based directed-energy weapons. These weapons could perform a variety of missions, such as antisatellite or ballistic missile defense. DARPA's effort to demonstrate the technology for space-based beam weapons will progress into the design and fabrication phase in FY 1985. Known as the DARPA TRIAD, the experiments include precision acquisition and pointing, high-energy cylindrical lasers operating at mid-infrared wavelengths, and large optics and beam control. These efforts are complemented by Air Force projects that examine laser lethality, target-hardening, survivability, and other issues that must be understood before decisions are made to proceed with systems development. The Strategic Defense Laser, initiated in FY 1984, is a joint Air Force/DARPA program to develop and demonstrate short-wavelength laser technology and associated beam control and compensation for ground-based lasers.

d. Defense Nuclear Agency (DNA)

DNA conducts DoD's nuclear weapons effects research program. Its mission is to assess the survivability of our military systems in a nuclear environment, to predict destruction thresholds of enemy systems, and to develop the technology to enhance the survivability and security of our forces. Their program includes underground nuclear and above ground high explosives testing, nuclear effects simulators, computer models, exoatmospheric experiments, evaluating the results of tests and simulations, and analyzing U.S. versus enemy nuclear warfighting capabilities, including the advanced concept directed-energy vulnerability assessment.

DNA's history as an innovator in the area of force survivability led the President's Commission on Strategic Forces to recommend that this agency lead the effort to resolve the uncertainties regarding the hardness of strategic missile silos, shelters, and mobile systems. Initial research on existing structures using state-of-the-art technologies demonstrated that DNA's continued involvement would reduce the risk of failure to achieve survivability goals and avoid costly design and implementation due to over-conservatism.

Given the diversity and continued growth of the Soviet nuclear threat, a substantial and sustained survivability program is required if we are to assure meaningful deterrence in the future. Assessing system survivability is a fundamental ingredient in our decisions on strategic systems like B-1B, Trident, Peacekeeper, and their supporting C^3. We must ensure that our forces will survive an attack in adequate numbers and that deployed systems will be effective in placing enemy forces at risk. A broad initiative is also well under way to improve and standardize the acquisition process for electromagnetic pulse hardening of C^3 systems. This effort will reduce costs substantially in acquiring new C^3 systems.

e. Nuclear Weapons Programs

The DoD and the DoE share statutory responsibilities, under the provisions of the Atomic Energy Act of 1954, as amended, for managing the U.S. nuclear weapons program. The DoE is fully supporting our programs to modernize strategic nuclear forces and to replace many outdated nonstrategic nuclear warheads. The goal of our nuclear weapons program is to improve military effectiveness, safety, security, survivability, and endurance in all environments. Each year the President issues a Nuclear Weapons Stockpile Memorandum authorizing the number and types of nuclear weapons that DoE will produce and transfer to DoD. The President also annually authorizes DoD to deploy nuclear weapons and authorizes DoD and DoE to conduct nuclear tests.

In support of our modernization programs, the DoE has produced a number of nuclear warheads for DoD's systems. These new weapons are essential to support our force structure modernization and to assure future effectiveness and survivability. Strengthening and broadening of the nuclear weapons technology base in both DoD and DoE are also essential to support future strategic and nonstrategic nuclear force modernization programs and especially to support the President's strategic defensive initiative. Developing and acquiring nuclear weapons involves long-lead times and requires sustained support to "see-through-to-completion" the modernization initiatives begun during the past two years. In the area of defensive technology research, several efforts show early promise, but sustained support over a period of several years is needed to demonstrate the feasibility of these concepts.

While we are making steady progress in most areas, the real payoff -- possessing adequate quantities of effective systems in the field -- remains ahead. Achieving our goals depends on continued congressional support, and we intend to work closely with the DoE and cognizant congressional committees and their staffs to ensure that our nuclear modernization programs are adequately explained and justified.

f. Test and Evaluation (T&E)

Test and evaluation (T&E) activities within the Department are carefully managed to ensure that testing is thoroughly planned, adequately funded, properly conducted, and independently evaluated. In conjunction with other management initiatives to improve the acquisition process, we are emphasizing the early involvement of the test community, maximum use of test data from all sources, and continuity of testing from early development stages through final operational deployment. We are now estimating the number of required test articles and test support resources earlier in the program so that sufficient numbers of them will be available when needed. Realism in test and evaluation is being enhanced by programs to develop accurate simulators of enemy systems which can duplicate the combat challenge as closely as possible within the practical limitations of funding constraints. We are also improving our testing techniques and instrumentation to field systems that work properly and reliably. Several efforts to improve our T&E capability are discussed below.

(1) Enhancing Our Test Capabilities

We have organized a tri-Service program to develop threat radar simulators that will represent the most capable potential enemy air defense systems. We have established agreements with Canada and other countries to permit testing in climates and terrains that closely represent the areas of the world where we face the greatest threat. Additionally, we are fielding an interim high-speed, low-altitude target capability while accelerating our program to develop an air-launched, supersonic, low-altitude aerial target which represents the latest potential threat.

Our ability to evaluate the performance and suitability of computer-intensive defense systems will be enhanced by an on-going program to develop better techniques for software test and evaluation. Modern electronic network technology is being assessed for its ability to tie together a number of geographically dispersed test resources and test data bases. This effort will conserve both time and resources during the testing of new weapon systems.

(2) Stressing Our Systems in the Joint Arena

We have six joint test programs under way to explore the capability of developmental and deployed systems to perform their intended missions in a joint operational environment. These tests involve C^3 countermeasures; electro-optical guided weapons countermeasures and counter-countermeasures; identification, friend, or foe; forward area air defense; and joint logistics over-the-shore. Each test is expected to provide important information on system effectiveness in situations where two or more Services must integrate their equipment and operations.

(3) Modernizing Our Test Ranges

Modernizing our test ranges reduces the time it takes to develop systems that meet the current threat. Our emphasis in this area has achieved results. For example, this year, the Army's High Energy

Laser Systems Test Facility, the Navy's Extended Area Test System, and the Air Force's Integration Facility for Avionics Systems Testing will become operational.

(4) Looking at International Alternatives

DoD's Foreign Weapons Evaluation Program, established in FY 1980, has begun to pay significant dividends. Under this program, the Services obtain existing equipment that meets their operational requirements, while saving time and money. To date, they have selected thirteen items of equipment, munitions, and weapons for procurement. The program also supports our NATO standardization initiatives.

g. Space Systems Operations

In July 1982, the President issued a new National Space Policy directing a balanced civil and national security space program. As part of this program, both the Air Force and the Navy have established space commands to centralize space activities and focus management attention on them. Our objectives in space include: pursuing a vigorous R&D program to give us future options in space; placing in space those functions that can be accomplished there better or at a lower cost; and developing an antisatellite system to assure our free access to space and to deter Soviet attacks against our satellites.

Our space programs include: making our space systems less vulnerable to attack; improving, through evolutionary changes, the surveillance, communications, and navigational capabilities of our space systems; increasing the flexibility of our space systems network by removing single nodes, procuring backup satellites, and reducing our dependency on overseas ground stations; and deploying satellites with multiple missions and with much longer operational life.

The NASA-developed Manned Space Shuttle will provide opportunities for increased payload weight and volume, on-orbit checkout and servicing of payloads, and eventually, retrieval of systems from low earth orbit. The first DoD use of the Shuttle to deploy an operational payload will occur later this year. An important element in this program is the inertial upper stage (IUS), a booster vehicle that allows spacecraft released from the Shuttle to be placed in higher altitude orbits. Although the IUS had successfully boosted two DoD communications satellites into orbit from a Titan missile in 1982, a flight problem was encountered last year during its first use aboard the Shuttle. After an intensive review, we are confident that problem causes have been identified and corrective action is under way. We expect to resume operations with the IUS by mid-year. Construction of Shuttle facilities at Vandenberg Air Force Base is proceeding well toward its scheduled completion in October, 1985. In addition, NASA facilities are being modified to protect classified DoD operations. Until these modifications are complete special security procedures will be used to protect classified data. Although we are pleased with the overall success of the Shuttle program, we are concerned with the reliance on the Shuttle as our sole access to space. As a result, we are evaluating commercially available launch vehicles to complement the Shuttle.

We have also begun work on the Consolidated Space Operations Center (CSOC) to augment existing satellite command and control capabilities as the volume of assets in space increases significantly in the late 1980s and to conduct DoD's planning and operations for the

Shuttle program. The CSOC control capability will be developed incrementally to match increasing operational requirements. We expect to conduct initial satellite control operations at this facility by late 1986, and to conduct initial Shuttle planning and operations during 1987.

h. Strategic Defense Initiative

When President Reagan called for a research program for a defense against ballistic missiles, he noted that such a program would be a tremendous challenge to our scientific and technical capability. Even so, preliminary studies have concluded that an effective defense against ballistic missiles is potentially feasible provided major research efforts in directed-energy weapons, conventional weapons, surveillance and target acquisition, and associated technologies are undertaken.

Directed-energy concepts offer the possibility of space-based defensive weapons that could be effective over thousands of miles, at or near the speed of light, to attack missiles in their boost or post-boost phases. The directed-energy research program will determine the feasibility of laser and particle-beam weapons.

Kinetic-energy weapon systems, which destroy their targets by direct impact, have considerable potential for intercepting reentry vehicles during the mid-course and terminal portions of their flight. They also could be particularly effective at destroying ballistic missiles during their boost phase. The program provides for research on both rocket and hypervelocity projectile technologies.

Solving the complex surveillance and acquisition problem and the associated battle management is the key to developing an effective multilayered ballistic missile defense. A comprehensive system must be able to warn of attacks; detect and track missiles, post-boost vehicles, and reentry vehicles throughout their trajectories; distinguish targets from decoys; and pass target location information to the defending weapon systems. To accomplish those functions, we plan to investigate infrared sensors and radars, laser designators, and high-capacity supporting computer systems.

By the end of the decade, we will have conducted ground, airborne, and space experiments to assess the feasibility of infrared-sensing and imaging-radar technologies. We also will have determined whether lasers and particle-beams can achieve sufficient lethality to destroy attacking missiles. The knowledge gained from these tests will help to identify those technologies that appear most promising and support decisions in the early 1990s on whether to proceed with development of ballistic missile defenses.

i. International Programs

(1) Policy Objectives

The basic objective of our international cooperation and technology transfer policy is for U.S., allied, and friendly nations' forces to attain, through equitable burdensharing, the necessary military readiness, sustainability, standardization, and interoperability to defend our common interests and preserve peace throughout the world. Our intent is to help allied and friendly nations strengthen their military and defense industrial base capabilities, which in turn enhances our mutual efforts to establish a formidable defense posture to deter aggression. Although we are interested in enhancing armaments cooperation with our allies, we are also exercising proper control of technology transfer to prevent Soviet theft of critical technologies, which would further erode our technological advantage.

(2) Current Programs and Initiatives within NATO

With regard to NATO, the Conference of National Armaments Directors (CNAD) is making considerable progress in three major areas: armaments cooperation, emerging technologies, and the restriction of Warsaw Pact access to militarily relevant technologies.

Our armaments cooperation initiatives conducted both within and outside the NATO forum have established an environment that supports the application of Alliance-wide technological and industrial capabilities to provide NATO forces with the best available defense equipment at the least cost. Examples of programs now under way include: the coproduction and installation of the NATO Seasparrow Point Defense Missile System on ships of nine NATO allies, the cooperative development by four NATO countries of a terminal guidance warhead for the multiple launch rocket system to attack enemy armor, the codevelopment and coproduction by the United States and the United Kingdom of the Harrier vertical takeoff and launching aircraft, and the French and U.S. development and production of a new engine for the KC-135 tanker fleet.

The term "emerging technologies" encompasses our efforts within the framework of armaments cooperation to focus the highest priority on fielding new weapon systems, based on near-term technology, that could improve significantly the conventional-force capabilities of the Alliance. The initiative is currently in a preliminary phase, wherein we expect to reach agreement on projects for emphasis.

The CNAD is also exchanging and summarizing data to facilitate decisionmaking in the Coordinating Committee for Multilateral Export Control (COCOM) on the restriction of Warsaw Pact access to militarily relevant technology. This area is covered in detail later in this chapter.

The Defense Science Board (DSB) Task Force on "International Industry-to-Industry Armaments Cooperation" has completed its report on Phase I -- NATO Europe. As noted in the report, considerable progress has been made by individual NATO nations toward maintaining technological superiority over potential adversaries. This includes an understanding of the importance of COCOM measures to safeguard and manage this technology in a manner that advances collective NATO security interests. DoD, in cooperation with the Departments of State and Commerce, has made considerable progress in maintaining the balance between the proper control and release of technologies, consistent with U.S. national security policies and security interests. The DSB report also indicated that armament codevelopment and coproduction programs with our NATO allies continue to strengthen NATO capabilities. The report specifically emphasizes the importance of establishing U.S. and allied industrial cooperation in a manner that provides reciprocity in the areas of technology sharing, distribution of work, and sales with our allies when it enhances NATO collective security interests.

The North Atlantic Assembly (NAA) also spoke out in favor of arms cooperation in their Resolution 126. Their action reinforced the congressional initiative embodied in the Roth-Glenn-Nunn Amendment to the 1983 Defense Authorization Act -- NATO Defense Industrial Cooperation. In particular, the NAA emphasized the importance of establishing the type of defense trade structure necessary for effective armaments cooperation. This structure will evolve through consultations and negotiations.

(3) Cooperation with Non-NATO Allies and Other Friendly Nations

The United States also shares strategic and security concerns with our non-NATO allies, as well as other friendly nations with whom we have no alliance arrangements. Our objectives with these nations are to further mutual security interests, primarily by assisting them in developing a self-sufficient defense capability.

We continue our armaments cooperation activities with friendly Middle East nations and the Republic of Korea. Cooperation with Israel, through the 1979 Memorandum of Agreement (MOA), has provided U.S. Military Services with essential information learned during the 1982 Israeli conflict in Lebanon. This exchange of information, as well as efforts to codevelop new systems, is expected to continue. We have begun several coproduction programs with Egypt under the auspices of our Defense Production Assistance Agreement with that country. We plan to amend this agreement to provide for data exchanges, which should further our cooperative efforts. We will begin a program of defense industrial cooperation with Pakistan that will improve their ability to support major purchases of U.S. equipment. Real progress is evident in our armaments cooperation with the Republic of Korea, where programs in tanks, communications, and missiles are helping to strengthen that country's defense capabilities.

We have also made gains in establishing a balanced armaments cooperation program with Japan. Japan has agreed to sharing their military technologies with the United States. This represents an exception to their normal policy which prohibits the export of Japanese arms or arms technologies. The United States will continue to encourage Japan to share arms technologies as a part of the overall objective of establishing a balanced armaments cooperation program.

In line with U.S. policy to contribute to China's modernization, including defense modernization, we have expanded the number of dual-use technologies available for sale to them. In addition, we are engaged in consultations with the Chinese to determine mutually agreeable levels of military technological cooperation. If the Chinese decide that it will be helpful to them, we are prepared to offer them certain U.S. defensive weapons and technical assistance that do not threaten our own security or that of our allies and friends.

Additionally, we are increasing defense technological and industrial cooperation with selected industrialized nations in Latin America. In particular, we are making good progress with Brazil.

Our efforts with non-NATO allies and other friendly nations continue to be conducted on the basis of enhancing mutual national security interests. We have approved the sale of defense equipment, with appropriate safeguards regarding technology transfer, to those nations whose policies are in consonance with U.S. and Alliance policies.

j. Conventional Initiatives

We have undertaken a new program to enhance our conventional deterrence and warfighting capabilities through a number of initiatives involving new technologies and systems. The program focuses on improving our conventional capability in order to reduce our reliance on nonstrategic nuclear weapons. This effort is in response to the Soviet/Warsaw Pact forces' improved capability to mass and maneuver rapidly, their continued upgrading of weapons (in particular conventional munitions on tactical ballistic missiles), and their dramatic increases in nonstrategic nuclear missiles.

These conventional initiatives have been integrated into an interdiction program involving both systems development and acquisition as well as joint program oversight and management. The two core programs in this area are the Joint Tactical Missile System (evolved from the Assault Breaker program), and the Joint Surveillance and Target Acquisition Radar System (Joint STARS) (evolved from the Pave Mover Standoff Target Acquisition System (SOTAS) and Moving Target Indicator (MTIR) programs). Other initiatives include the Joint Tactical Fusion Program and the Joint Suppression of Enemy Air Defenses. The conventional initiatives program represents the convergence of technologies into weapons accuracy, munitions lethality, target acquisition sensors, digital processing, and high-volume communications. Operational application of these technologies will improve our ability to reduce the number of reinforcements reaching the main combat area.

An Interdiction Executive Board has been formed to ensure that Army and Air Force programs are integrated into a total interdiction system. The Board consists of key members of the OSD, JCS, Services, and Unified and Specified Command staffs. Their focus is to ensure that acquisition is expedited and that a complete system is fielded at the earliest date possible within cost and schedule constraints. The SACEUR has stated that he needs a conventional alternative to attack Warsaw Pact follow-on forces in the event of a conflict in Europe. The interdiction program is the center of the conventional alternative.

A Munitions Council has been formed to develop comprehensive plans for conventional munitions modernization and procurement. This group's efforts should lead to acquiring a more affordable and effective mix of modern munitions.

3. Technology Transfer and Export Control Initiatives and Achievements

DoD has taken the following steps to implement the technology transfer policy described in Part I.

a. Automation of Case Processing

A computerized information system called the Foreign Disclosure and Technical Information System is a dedicated secure computer network and data base that includes U.S. and COCOM export cases, critical technology data, and other relevant information. The network links DoD's newly established Technology Security Center with similar functions within the Services and Defense Agencies. This network will soon be extended to the U.S. COCOM delegation in Paris and other Departments in the Washington area.

b. Technology Security Center

DoD has established a Technology Security Center to focus and coordinate the DoD export control process. This center serves as the focal point for coordination with industry, the Military Services, and other DoD and governmental agencies involved in case processing.

c. Export Control Guidelines

During the past year, we achieved interagency agreement on the list of military items that will be offered for export to the Peoples' Republic of China. In other areas, we developed technical guidelines for the export of computer hardware and software to Eastern Europe, and are providing the Department of Commerce with an extensive list of DoD Delegations of Authority (DOAs) for export control. Among other things, this review will benefit U.S. manufacturers through the relaxation of export controls over selected medical equipment and laboratory instruments.

The Department of Defense has long recognized the need to rewrite the Technical Data Regulations (administered by the Department of Commerce) in order to improve the control of critical technology identified in the Military Critical Technology List. While the regulations control direct technology transfers to potential adversaries, there is a considerable potential for diversion through third countries. While existing regulations are clearly inadequate to protect our critical technology, we recognize that more stringent controls would impose an additional burden on U.S. exporters. We have, therefore, provided the Department of Commerce with a proposal that balances tightening certain technical data transfers to all destinations with appropriate reductions on the control of products. When implemented, these initiatives will lead to tighter controls in critical technology exports to all destinations but decreased controls in the exports of noncritical technology to many destinations.

d. Military Technology Transfers

We have under way several initiatives to transfer selected advanced military technologies to our allies. Such transfers are made in the context of cooperative defense efforts and security assistance when mutual benefits can be derived. Examples include the Multiple Launch Rocket System (MLRS) and the AV-8B V/STOL Light Attack Aircraft. These two examples illustrate the thrust of our armaments cooperation programs, which are based on politically and economically acceptable arrangements of codevelopment and coproduction through industrial teaming. These joint efforts strengthen bilateral ties among allied nations, promote the two-way transfer of industrial technology, and increase NATO's military capability.

e. Multilateral Coordinating Committee (COCOM)

The COCOM (comprising representatives from Japan and the NATO countries, except Iceland and Spain) has developed an agreed list of restricted items to control the transfer of products and technology to the Warsaw Pact. Following the first high-level meeting of the COCOM in nearly 30 years (January 1982), the United States proposed several major initiatives to strengthen multilateral controls over the export of strategic technologies and equipment to the Warsaw Pact countries. DoD has been in the forefront of this effort, preparing well over a hundred technical proposals to be used in the COCOM list review. We have also provided most of the technical support at the negotiating table. Our efforts in this area have been very successful inasmuch as the COCOM has agreed to provide new coverage in many areas that were previously uncontrolled.

f. Interaction with Industry and Academia

In addition to interacting closely with industry on specific export cases and participating in the interagency "Public Awareness Program," we are also working to improve industry's understanding of critical technology issues. The Defense Policy Advisory Committee (DPAC), the Defense Science Board (DSB), and the American Defense Preparedness Association (ADPA) are good examples of fora for discussing technology transfer issues.

We have established a DoD/University forum to consider the question of technology export control. Our objective here is to identify and define those sensitive areas of technology where some control, short of security classification, is warranted, while providing for traditional open international scientific communications. We share the National Academy of Sciences' view that protecting the free exchange of basic scientific information is imperative.

g. Conclusion

The defense program in export control and technology transfer has enhanced our operating policies and procedures so that export license applications are now being processed more expeditiously, consistently, and systematically. While we are aware of the rapidly increasing worldwide importance of trade in technology, we are also keenly aware of the crucial need to maintain our technological lead. By maintaining that lead, we can offset the significantly superior numbers of weapons and troops available to potential adversaries.

4. Deterrence of Chemical Warfare

a. Introduction

Responding to the threat of chemical warfare has been a particularly difficult issue for our nation to face. While all forms of warfare are terrible, chemical warfare particularly outrages civilized people because of the human suffering it can inflict. The question we must address is how to ensure these weapons are not used against either civilians or the men and women of our armed forces.

In accordance with our international treaty obligations, the United States does not and will not possess biological or toxin weapons. With respect to chemical warfare, our goal is to eliminate the threat of chemical warfare by obtaining a complete, verifiable ban on the development, production, stockpiling, and transfer of chemical weapons. Negotiations to achieve this goal are under way now at the Conference on Disarmament in Geneva, where the United States is leading the effort to negotiate a complete, verifiable ban on chemical weapons. In 1983, major U.S. initiatives included the Vice President's speech to the Conference on Disarmament, in which he urged all members to join with the United States in intensifying efforts towards achieving an effective chemical weapons ban; the submission of our detailed views on the contents of a ban; introduction of a proposal for the verification of stockpile destruction; and the hosting of an international workshop on chemical stockpile destruction and verification at our chemical weapons destruction facility in Utah. A ban remains elusive, however, despite many years of effort and more than fourteen years of unilateral U.S. restraint in chemical weapons production, primarily due to Soviet unwillingness to address seriously the crucial issues of verification and compliance.

Chemical weapons exert their greatest impact on the course of battle when there is an imbalance in chemical capabilities between the two sides. The Soviet Union possesses a considerable advantage in chemical warfare capabilities, which could be a decisive factor in conventional conflicts. Working or fighting in protective gear -- the mask, hood, special suit, gloves, and boots -- can be so debilitating that the protective measures themselves can be as damaging to military operations as direct casualties. The problems faced by an individual -- heat stress, restricted movement, impaired vision, and limited communications -- are compounded when people must work or fight as a unit. Tasks which are demanding under "normal" battlefield circumstances -- repairing runways and other facilities, rescuing and treating casualties, flying aircraft, and defending against armored attacks -- become much more difficult in a chemically contaminated environment.

The United States and its allies are investing billions of dollars in conventional forces to have the capability to turn back a Soviet conventional attack. Our lack of an effective retaliatory chemical capability, however, could provide the Soviets with a powerful incentive to use chemical weapons to negate these conventional force improvements. If we do not restore a credible chemical retaliatory capability, nuclear weapons might be all we would have left to deny the Soviets victory. We want to decrease rather than increase our reliance on nuclear weapons to deter conventional conflict.

Until we can achieve an effective chemical weapons ban, we must have the capability to deter others from using chemical weapons against us or our allies. The United States will never initiate chemical warfare but, since World War I, has possessed both protective equipment and a stockpile of chemical weapons as a deterrent; indeed the existence of such stocks of weapons is generally credited with having deterred Hitler from using chemical weapons. However, our current aging stocks of chemical weapons, produced in the 1950s and 1960s, no longer constitute an adequate deterrent, primarily due to obsolete means of delivery. We must reestablish and maintain a credible chemical deterrent; our program is designed to do this and no more.

For an effective deterrence, we have no need to match the size and scope of either the Soviet chemical weapons or protection capabilities. We do, however, require an adequate chemical defense and a modest, but effective, chemical retaliatory capability. Most of the resources in our program are devoted to improving protective capabilities -- suits, detectors, shelters, decontamination equipment, and antidotes. However, all foreseeable effective chemical protective equipment and procedures will continue to hamper individual and unit effectiveness severely. Therefore, improving our protective posture will not by itself provide an adequate deterrent, since the Soviets would enjoy a significant and perhaps decisive military advantage if they could force us to operate in protective equipment while their troops remained relatively unencumbered. To possess an effective deterrent, we must reestablish a retaliatory capability sufficient to assure that the Soviets, too, would have to operate in a protective posture.

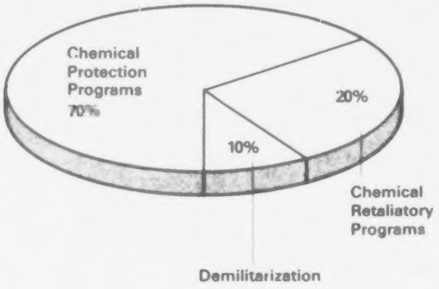
In addition to pursuing a chemical arms ban and reestablishing a chemical deterrent, our program includes plans for the disposal of obsolete and unusable stocks of chemical agents and munitions.

b. FY 1985-89 Programs

(1) Chemical Warfare Protection

Our chemical protective program, comprising more than 70% of the FY 1985-89 chemical funding (see Chart III.I.4), will improve the capability of our forces to operate in a chemical warfare environment and reduce the degradation in effectiveness imposed by chemical protective equipment and procedures. Our major emphasis will be to develop and field improved protective equipment and supplies, including medical items. Training, exercises, and doctrine will remain key components of the chemical protective program.

Chart III.I.4
FY 1985-89 Funding for Chemical Programs



Although we are not yet where we need to be with regard to chemical protection, considerable progress has been made. Of most significance is the increased chemical-related training in all Services. We are increasing the instructional time devoted to chemical defense, the number of trained specialists, the amount of time spent by operational units in protective gear, and the frequency and extent of chemical operations in major field exercises. In addition, we have fielded improved detection equipment and will be acquiring collective protective equipment for fixed installations and mobile units.

(2) Chemical Retaliatory Capability

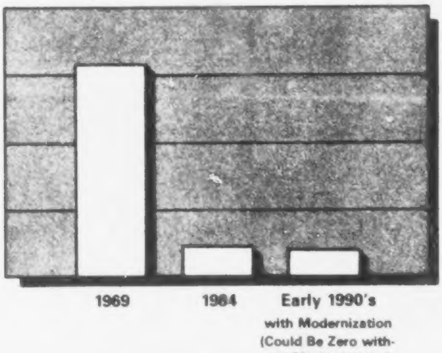
A chemical retaliatory capability, in conjunction with a strong protective posture, is essential to ensuring that the Soviets have no incentive to use chemical weapons against us or our allies. Unfortunately, as shown in Chart III.I.5, the capabilities of our chemical stockpile have declined significantly since we last produced chemical weapons in 1969. This decline has been due primarily to the phasing out of compatible delivery systems such as the Honest John rocket, the 105mm howitzer, and obsolete rocket launchers.

Our proposed program will continue maintenance efforts to attempt to preserve the serviceability of the militarily useful portion of the current munitions stockpile. However, maintenance cannot halt or reverse internal deterioration of the chemical agent fill, nor can it provide an effective deep-target capability in the absence of appropriate weapons or ease the logistical burdens associated with the current, highly toxic chemical munitions. Therefore, modernization of the stockpile is urgently required; it represents about 20% of our FY 1985-89 program.

Our FY 1985 program will provide some production facilities and begin procurement of long-lead items for the 155mm binary artillery projectile and the Bigeye bomb. The FY 1984 Defense Authorization Act proscribes assembly of chemical munitions prior to 1 October 1985. The Act permits assembly after that date only if the President certifies that production remains in the national interest. However, because the Congress did not appropriate FY 1984 funds, the earliest availability of the binary artillery projectile has slipped to 1986. Problems with the Bigeye bomb that caused us to withdraw our FY 1984 procurement request have been resolved, and we are requesting FY 1985 funding for industrial facilities and long-lead items for this highest priority chemical deterrent program.

Chart III.I.5

Number of Militarily Useful Chemical Weapons



(3) Demilitarization

About 10% of our chemical program funds will be used to dispose of chemical munitions. Most of these funds will be used for the disposal of those chemical munitions that could pose safety problems. We are, at the same time, proceeding with technology development and planning for the disposal of other obsolete or unusable munitions and, if negotiations are successful, to dispose of the entire chemical stockpile. Construction of a facility to dispose of the highly flammable agent BZ at Pine Bluff Arsenal, Arkansas was approved for FY 1984. In FY 1985, we are requesting funds to construct a demilitarization facility at Johnston Island. Future facilities are planned at other locations.

c. Conclusion

Improving our chemical deterrent capability is vital if we are to eliminate the Soviets' incentive to use chemical weapons and to provide an inducement for them to join us and the rest of the world in a comprehensive, verifiable chemical weapons ban. Both the protective and retaliatory components of the program are essential. The current imbalance invites the Soviets to use chemical weaponry and could give them a decisive edge in conventional conflict. Failure to modernize both program components will undermine international efforts to achieve what we and most of the world desire -- a total, verifiable ban on the development, production, and stockpiling of chemical weapons.

5. Special Operations Forces

Revitalizing our Special Operations Forces (SOF) remains one of this Administration's highest priorities. And, over the last three years, we have made significant progress toward achieving that goal. The high priority we have assigned to SOF revitalization reflects our recognition that low-level conflict -- for which SOF are uniquely suited -- will pose the threat we are most likely to encounter throughout the end of this century. We must have strong SOF if we are to meet this and other challenges across the broad spectrum of conflict.

We have sought to build a force capable of meeting its global responsibilities by forming a new Special Forces Group, new SEAL Teams, and a Special Operations Aviation Task Force. Our program also includes procuring additional MC-130 Combat Talon aircraft and HH-60D helicopters, and a new naval special warfare craft. We have also begun research and development of follow-on naval and air systems. At the same time, we are replacing outdated equipment to increase near-term readiness. Where possible, we are procuring off-the-shelf equipment to reduce cost.

We are also improving SOF training, particularly in critical skills such as language and area orientation on which the success of special operations often depends. We are working to ensure that those who volunteer for a demanding career in special operations are appropriately rewarded for what is inherently a risky endeavor, and that their opportunities for career advancement are equal to their peers in other fields of military service.

Finally, we recognize that SOF effectiveness has, for too long, been degraded by command and control deficiencies. We are confident that the Joint Special Operations Agency, created on 1 January 1984, will help us develop truly effective joint special operations.

Appendix A

Table 1
Department of Defense — Budget Authority by Appropriation (Dollars in Millions)

	FY 1972	FY 1976	FY 1980	FY 1982	FY 1983	FY 1984	FY 1985
Current Dollars							
Military Personnel	22,964	25,430	31,014	42,875	45,688	48,574	70,535*
Retired Pay	3,901	7,326	11,965	14,986	16,155	16,552	
Operation & Maintenance	20,792	28,731	46,365	62,466	66,540	70,940	81,416
Procurement	17,777	20,991	35,283	64,462	80,355	85,996	107,608
Research, Development, Test & Evaluation	7,519	9,451	13,561	20,060	22,798	26,868	34,015
Special Foreign Currency Program	12	3	7	3	4	3	9
Military Construction	1,287	2,360	2,293	4,916	4,512	4,521	7,167
Family Housing & Homeowners Assistance Program	860	1,229	1,526	2,203	2,712	2,674	3,162
Revolving & Management Funds		135	1,336	2,494	1,075	2,525	1,762
Trust Funds, Receipts, & Deductions	-106	-146	-727	-714	-365	-503	-674
Total — Direct Program (B/A)	***75,006***	***96,508***	***142,621***	***213,751***	***239,474***	***258,151***	***306,000***
FY 1985 Dollars							
Military Personnel	58,647	48,569	45,948	48,419	49,603	51,146	70,535*
Retired Pay	10,288	13,106	15,491	16,372	16,682	16,811	
Operation & Maintenance	54,429	53,341	58,243	68,552	71,043	73,517	81,416
Procurement	46,571	42,797	48,713	75,892	89,480	90,647	107,608
Research, Development, Test & Evaluation	18,204	17,149	17,933	22,908	24,902	28,113	34,015
Special Foreign Currency Program	28	5	8	4	4	3	9
Military Construction	3,191	4,285	2,933	5,604	4,918	4,717	7,167
Family Housing & Homeowners Assistance Program	2,068	2,244	2,033	2,467	2,955	2,796	3,162
Revolving & Management Funds	—	254	1,824	2,862	1,176	2,648	1,762
Trust Funds, Receipts, & Deductions	-256	-276	-993	-820	-399	-527	-674
Total — Direct Program (B/A)	***193,170***	***181,475***	***192,133***	***242,230***	***260,365***	***269,872***	***306,000***

(NOTE: Totals may not add due to rounding.)
*Includes Retired Pay Accrual.

Table 2
Department of Defense — Budget Authority by Component (Dollars in Millions)

	FY 1972	FY 1976	FY 1980	FY 1982	FY 1983	FY 1984	FY 1985
Current Dollars							
Department of the Army	21,582	23,644	34,380	52,254	57,529	62,327	78,942*
Department of the Navy	23,602	31,302	47,225	69,569	81,854	81,872	102,302*
Department of the Air Force	23,245	28,444	41,720	64,821	74,074	86,119	109,367*
Defense Agencies/OSD/JCS	1,759	3,486	5,643	9,222	9,256	10,739	13,845
Defense-wide	4,818	8,632	13,653	17,885	16,761	17,095	544
Total — Direct Program (B/A)	***75,006***	***96,508***	***142,621***	***213,751***	***239,474***	***258,151***	***306,000***
FY 1985 Dollars							
Department of the Army	54,214	44,071	47,044	59,403	62,657	65,272	78,942*
Department of the Navy	60,703	60,352	63,632	79,251	89,490	85,756	102,302*
Department of the Air Force	61,519	55,251	56,338	73,453	80,839	90,268	109,367*
Defense Agencies/OSD/JCS	4,234	6,304	7,373	10,460	10,034	11,195	13,845
Defense-wide	12,500	15,498	17,745	19,663	17,345	17,381	544
Total — Direct Program (B/A)	***193,170***	***181,475***	***192,133***	***242,230***	***260,365***	***269,872***	***306,000***

(Note: Totals may not add due to rounding.)
*Includes Retired Pay Accrual.

Table 3
Federal Budget Trends

Fiscal Year	Federal Outlays as % of GNP	DoD Outlays as a % of Federal Outlays	DoD Outlays as % of GNP	Non-DoD Outlays as % of Federal Outlays	Non-DoD Outlays as % of GNP	DoD Outlays as % of Net Public Spending[1]
1950	16.1	27.4	4.4	72.6	11.7	18.5
1955	18.0	51.3	9.2	48.7	8.8	35.5
1960	18.5	45.0	8.3	55.0	10.2	30.3
1965	18.0	38.7	7.0	61.3	11.0	25.2
1970	20.2	39.4	8.0	60.6	12.2	25.4
1971	20.4	35.4	7.2	64.6	13.2	22.4
1972	20.4	32.6	6.7	67.4	13.8	20.7
1973	19.6	29.8	5.8	70.2	13.8	19.0
1974	19.4	29.0	5.6	71.0	13.8	18.3
1975	21.9	26.2	5.7	73.8	16.2	16.8
1976	22.2	24.1	5.4	75.9	16.9	15.6
1977	21.5	23.9	5.1	76.1	16.4	15.8
1978	21.4	23.0	4.9	77.0	16.5	15.4
1979	20.8	23.4	4.9	76.6	16.0	15.6
1980	22.4	23.0	5.2	77.0	17.2	15.6
1981	22.8	23.8	5.4	76.2	17.4	16.1
1982	23.8	25.1	6.0	74.9	17.8	17.0
1983	24.7	25.8	6.3	74.2	18.3	17.6
1984	24.0	27.1	6.5	72.9	17.5	18.5

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[1] Federal, state, and local net spending excluding government enterprises (such as the postal service and public utilities) except for any support these activities receive from tax funds.

Table 4
Defense Shares of Economic Aggregates

Fiscal Year	DoD as a Percentage of Public Employment		DoD as a Percentage of National Labor Force		National Income Accounts Percentage of Total Purchase		
	Federal	Federal State & Local	Direct Hire (DoD)	Including Industry	National Defense[1]	Total Federal	State & Local
1965	71.3	29.3	5.0	7.8	7.3	9.8	10.3
1966	73.0	30.6	5.6	9.0	7.5	10.0	10.4
1967	74.1	31.5	6.0	10.0	8.6	11.1	10.9
1968	74.0	31.3	6.1	10.0	9.0	11.4	11.4
1969	73.2	30.1	5.9	9.4	8.4	10.8	11.7
1970	72.3	27.7	5.3	8.1	7.8	10.0	12.1
1971	68.3	24.4	4.6	7.0	7.0	9.2	12.6
1972	66.0	21.9	4.0	6.2	6.4	8.9	12.8
1973	65.0	20.7	3.7	5.8	5.8	8.1	12.8
1974	63.8	19.7	3.5	5.5	5.3	7.6	13.0
1975	62.9	18.7	3.4	5.3	5.4	6.0	13.8
1976	62.5	18.1	3.3	5.0	5.2	7.6	13.9
1977	62.5	17.6	3.2	5.0	4.9	7.5	13.1
1978	61.9	17.3	3.1	4.8	4.7	7.2	13.0
1979	61.1	16.8	2.9	4.8	4.6	7.0	12.7
1980	61.3	16.7	2.8	4.7	4.9	7.4	12.9
1981	62.4	17.0	2.8	4.8	5.1	7.6	12.5
1982	63.3	17.5	2.8	4.9	5.7	8.2	12.6
1983	63.5	17.8	2.8	5.2	6.1	8.6	12.7
1984	64.0	18.0	2.8	5.5	6.3	8.8	12.7

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[1] Includes Department of Defense — military, atomic energy defense activities, and other defense-related activities, such as emergency management and maintenance of strategic stockpiles and the Selective Service System.

Appendix B

Manpower Tables

Table 1
Department of Defense
General and Flag Officer Strengths

Actual	General and Flag Officer Strengths	General and Flag Officers Per 10,000 Total Military
1961	1,254	5.0
1962	1,303	4.6
1963	1,292	4.8
1964	1,294	4.8
1965	1,287	4.8
1966	1,320	4.3
1967	1,334	4.0
1968	1,362	3.8
1969	1,336	3.9
1970	1,339	4.4
1971	1,330	4.9
1972	1,324	5.7
1973	1,291	5.7
1974	1,249	5.8
1975	1,199	5.6
1976	1,184	5.7
19TQ	1,174	5.7
1977	1,159	5.6
1978	1,119	5.4
1979	1,119	5.5
1980	1,118	5.4
1981	1,073	5.2
1982	1,073	5.1
1983	1,073	5.1
Programmed		
1984	1,073	5.0
1985	1,073	5.0

Table 2
Department of Defense
Officer Strength — In Thousands

Actual	Officer Strengths[a]	Enlisted to Officer Ratio
1961	316	6.9
1962	343	7.2
1963	334	7.1
1964	337	7.0
1965	339	6.8
1966	349	7.9
1967	384	7.8
1968	416	7.6
1969	419	7.3
1970	402	6.3
1971	371	6.3
1972	336	5.9
1973	321	6.0
1974	302	6.2
1975	292	6.3
1976	281	6.4
19TQ	279	6.5
1977	275	6.5
1978	273	6.5
1979	273	6.4
1980	277	6.3
1981	282	6.3
1982	291	6.2
1983	299	6.1
Programmed		
1984	304	6.0
1985	310	5.9

[a] Includes all active forces officers on extended active duty.

Table 3
Military and Civilian Personnel Strength[a]
(End Fiscal Years — In Thousands)

	Actuals							Programmed	
	FY 1968	FY 1972	FY 1976	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	FY 1985
Active Military									
Army	1,570	811	779	777	781	780	780	780	781
Navy	765	588	525	527	540	553	557	565	575
Marine Corps	307	198	192	188	191	192	194	197	200
Air Force	905	726	585	558	570	583	592	594	610
Total	***3,547***	***2,322***	***2,081***	***2,050***	***2,082***	***2,108***	***2,123***	***2,136***	***2,166***
Reserve Components (Selected Reserve)									
Army National Guard	389	388	362	367	389	408	417	433	447
Army Reserve	244	235	195	207	225	257	266	278	298
Naval Reserve	124	124	97	87	88	94	109	122	129
Marine Corps Reserve	47	41	30	35	37	40	43	44	46
Air National Guard	75	89	91	96	98	101	102	104	108
Air Force Reserve	43	48	48	59	62	64	67	70	75
Total	***922***	***925***	***823***	***851***	***899***	***963***	***1,005***	***1,051***	***1,104***
Direct Hire Civilian									
Army[b]	462	367	329	312	318	322	332	342*	342*
Navy	419	342	311	298	310	308	328	329*	329*
Air Force[b]	331	280	248	231	233	233	238	236*	240*
Defense Agencies	75	61	72	75	79	84	82	87*	88*
Total	***1,287***	***1,050***	***960***	***916***	***940***	***947***	***980***	***994****	***999****

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[a] Numbers may not add to totals due to rounding.

[b] These totals include Army and Air National Guard technicians, who were converted from State to Federal employees in FY 1979. The FY 1968 total has been adjusted to include approximately 3,900 technicians.

*Estimated.

Table 4
U.S. Military Personnel in Foreign Areas[a]
(End-Year — In Thousands)

	FY 1968	FY 1972	FY 1976	FY 1979	FY 1980	FY 1981	FY 1982	FY 1983
Germany	225	210	213	239	244	248	256	254
Other Europe	66	62	61	61	65	64	67	70
Europe, Afloat	23	26	41	25	22	25	33	18
South Korea	67	41	39	39	39	38	39	39
Japan	79	64	46	46	46	46	51	49
Other Pacific	37	25	27	15	15	15	15	15
Pacific Afloat (Including Southeast Asia)	94	51	24	22	15	25	33	34
Miscellaneous Foreign	27	22	8	11	42	39	34	41
Total	***1,200***	***595***	***460***	***458***	***488***	***502***	***528***	***520***

---

[a] Numbers may not add to totals due to rounding.

Appendix C

Force Tables

Department of Defense
Strategic Forces Highlights

	FY 1976	FY 1980	FY 1983	FY 1984	FY 1985
Strategic Offensive					
Land-Based ICBMs:					
TITAN	54	52	42	31	23
MINUTEMAN	1,000	1,000	1,000	1,000	1,000
Strategic Bombers (PAA)*					
B-52D	145	75	31	–	–
B-52G/H	241	241	241	241	241
FB-111	66	60	56	56	56
Fleet Ballistic Launchers (SLBMs):					
POLARIS	240	80	–	–	–
POSEIDON (C-3 and C-4)	416	496	496	496	496
TRIDENT	–	–	72	120	144
Strategic Defense					
Interceptors (PAA/Squadrons)*:					
Active	141/6	127/7	90/5	90/5	90/5
Air National Guard	262/15	165/10	162/10	162/10	180/11

Department of Defense
General Purpose Forces Highlights

	FY 1976	FY 1980	FY 1983	FY 1984	FY 1985
Land Forces					
Army Divisions:					
Active	16	16	16	16	17
Reserve	8	8	8	9	9
Marine Corps Divisions:					
Active	3	3	3	3	3
Reserve	1	1	1	1	1
Tactical Air Forces (PAA/Squadrons)*					
Air Force Fighter/Attack:					
Active	1608/74	1680/79	1739/78	1752/78	1782/79
Reserve	758/36	792/39	840/43	852/43	864/43
Navy Fighter/Attack:					
Active	967/65	894/60	894/60	939/63	967/65
Reserve	120/10	120/10	120/10	120/10	120/10
Marine Corps Fighter/Attack:					
Active	422/25	422/25	401/24	401/24	422/24
Reserve	96/8	84/7	84/7	84/7	96/8
Naval Forces					
Strategic Forces Ships	50	48	41	41	43
Battle Forces Ships	367	384	420	426	434
Support Forces Ships	63	41	43	46	56
Reserve Forces Ships	4	6	9	12	14
Total Deployable Battle Forces	***484***	***479***	***513***	***525***	***546***
Reserve Forces Ships	57	44	26	24	18
Auxiliaries and Sealift Forces	14	15	28	35	43
Total Other Forces	***71***	***59***	***54***	***59***	***61***

*PAA = Primary Aircraft Authorized.

Department of Defense Airlift and Sealift Force Highlights

	FY 1976	FY 1980	FY 1983	FY 1984	FY 1985
Intertheater Airlift (PAA)[a]					
C-5A	70	70	70	70	70
C-141	234	234	234	234	234
KC-10A	—	—	18	25	35
Intratheater Airlift (PAA)[a]					
Air Force Active:					
C-130	234	218	218	218	216
Air Force Reserve & National Guard:					
C-130	262	264	294	302	302
C-123	64	64	—	—	—
C-7A	51	48	16	—	—
Active Navy & Marine Corps Tactical Support	40	45	47	47	38
Reserve Navy & Marine Corps Tactical Support	33	34	35	33	34
Sealift					
Ships, Active:					
Tankers	12	21	21	21	26
Cargo	19	14	14	14	14
Controlled Fleet Charters:					
Tankers	14	14	12	12	12
Cargo	21	23	28	30	40
National Defense Reserve Fleet[b]	144	164	186	202	214

[a] PAA = Primary Aircraft Authorized

[b] Includes commercial dry cargo ships and the Ready Reserve Force

Appendix D

Glossary

ACRONYMS

AAA:	Antiaircraft Artillery
AAW:	Antiair Warfare
ABCCC:	Airborne Command and Control Center
ABM:	Antiballistic Missile
ACCS:	Air Command and Control System
ACDA:	Arms Control and Disarmament Agency
ACE:	Allied Command Europe
ACM:	Advanced Cruise Missile
ACS:	Artillery Computer System
ADCAP:	Advanced Capability (torpedo)
ADDS:	Army Data Distribution System
ADP:	Automatic Data Processing
ADPA:	American Defense Preparedness Association
ADPE:	Automatic Data Processing Equipment
AFATDS:	Advanced Field Artillery Tactical Data System
AFSATCOM:	Air Force Satellite Communications
AFQT:	Armed Forces Qualification Test
AGED:	Advisory Group for Electronic Devices
AIM:	Air Intercept Missile
AIP:	Acquisition Improvement Program, Automated Information Processing
ALCM:	Air-Launched Cruise Missile
ALOC:	Air Line of Communication
ALWT:	Advanced Lightweight Torpedo
AMRAAM:	Advanced Medium-Range Air-to-Air Missile
ANG:	Air National Guard
ANZUS:	Australia-New Zealand-U.S. (treaty)
AOE:	Multipurpose Stores Ship
AR:	Repair Ship
ASAT:	Antisatellite
ASCM:	Antiship Cruise Missiles
ASPJ:	Airborne Self-Protection Jammer
ASROC:	Antisubmarine Rocket
ASW:	Antisubmarine Warfare
ASW/SOW:	ASW Standoff Weapon
ATF:	Advanced Tactical Fighter
AUTODIN:	Automated Digital Network
AUTOVON:	Automatic Voice Network
AWACS:	Airborne Warning and Control System

BA:	Budget Authority
BB:	Battleship
BCS:	Battery Computer System
BDS:	Battlefield Data System
BETA:	Battlefield Exploitation and Target Acquisition
BFV:	Bradley Fighting Vehicle
BMAR:	Backlog of Maintenance and Repair
BMEWS:	Ballistic Missile Early Warning System

C^3:	Command, Control, and Communications
C^3CM:	Command, Control, and Communications Countermeasures
C^3I:	Command, Control, Communications, and Intelligence
CAIG:	Cost Analysis Improvement Group

CAP:	Civil Action Program
CDE:	Conference on Disarmament in Europe
CEP:	Circular Error, Probable
CEWI:	Combat Electronic Warfare Intelligence
CG:	Guided-Missile Cruiser
CGN:	Nuclear-Powered Guided Missile Cruiser
CH:	Cargo Helicopter
CHAMPUS:	Civilian Health and Medical Program of the Uniformed Services
CINC:	Commander-in-Chief
CINCSAC:	Commander-in-Chief, Strategic Air Command
CIS:	Combat Identification System, Communication Industrial Services
CIWS:	Close-In Weapon System
CMS:	Crisis Management System
CNAD:	Conference of National Armaments Directors
COB:	Collocated Operating Base
COCOM:	Coordinating Committee for Multilateral Export Controls
COMINT:	Communications Intelligence
COMSEC:	Communications Security
CONUS:	Continental United States
COR:	Command Operationally Ready
CORE:	Contingency Response Program
CPI:	Consumer Price Index
CRAF:	Civil Reserve Air Fleet
CSOC:	Consolidated Space Operations Center
CV:	Aircraft Carrier
CVBG:	Aircraft Carrier Battle Group
CVN:	Aircraft Carrier, Nuclear-powered
CVV:	Aircraft Carrier, Medium-sized
CY:	Calendar Year or Current Year
CW:	Chemical Warfare
DARPA:	Defense Advanced Research Projects Agency
DCA:	Dual-Capable Aircraft, Defense Communications Agency
DCAA:	Defense Contract Audit Agency
DCS:	Defense Communications System
DDG:	Guided Missile Destroyer
DDN:	Defense Data Network
DEIMS:	Defense Economic Impact Modeling System
DEW:	Distant Early Warning (Line)
DFH:	Deployable Field Headquarters
DG:	Defense Guidance
DIA:	Defense Intelligence Agency
DIVAD:	Division Air Defense (gun)
DLA:	Defense Logistics Agency
DMSP:	Defense Meteorological Satellite Program
DNA:	Defense Nuclear Agency
DOA:	Delegation of Authority
DoD:	Department of Defense
DoDFCI:	Department of Defense Foreign Counterintelligence Program
DoE:	Department of Energy
DPAC:	Defense Policy Advisory Committee
DRB:	Defense Resources Board
DSB:	Defense Science Board
DSCS:	Defense Satellite Communication System
DSN:	Defense Switched Network

EAM:	Emergency Action Message
EC:	Electronic Combat
ECCM:	Electronic Counter-Countermeasures
ECM:	Electronic Countermeasures
ECWG:	Emergency Communications Working Group
EDS:	European Distribution System
EHF:	Extremely High Frequency
EJS:	Enhanced JTIDS System
ELF:	Extremely Low Frequency
EMP:	Electromagnetic Pulse
EMPB:	Emergency Mobilization Preparedness Board
EPA:	Environmental Protection Agency
ER/RB:	Enhanced Radiation/Reduced Blast
ESF:	Economic Support Fund
EW:	Electronic Warfare

FAASV:	Field Artillery Ammunition Support Vehicle
FFG:	Guided Missile Frigate
FFMIP:	Foreign Military Sales Financial Management Improvement Program
FHE:	Forward Headquarters Element
FLIR:	Forward-Looking Infrared
FLTSATCOM:	Fleet Satellite Communications System
FMC:	Fully Mission Capable
FMS:	Foreign Military Sales
FMSCR:	Foreign Military Sales Credit (Financing)
FORDTIS:	Foreign Disclosure and Technical Information System
FRG:	Federal Republic of Germany
FRR:	Force Readiness Report
FTS:	Fleet Training Squadron, Full-Time Support
FY:	Fiscal Year
FYDP:	Five-Year Defense Program

GLCM:	Ground-Launched Cruise Missile
GLLD:	Ground Laser Locator Designator
GME:	Greater Middle East
GMF:	Ground Mobile Forces
GNP:	Gross National Product
GPS:	Global Positioning System
GWEN:	Ground Wave Emergency Network

HARM:	High Speed Antiradiation Missile
HEMTT:	Heavy Expanded Mobility Tactical Truck
HF:	High Frequency
HLG:	High-Level Group
HMMWV:	High Mobility Multipurpose Wheeled Vehicle
HNS:	Host Nation Support

ICBM:	Intercontinental Ballistic Missile
ICM:	Improved Conventional Munition
IEB:	Interdiction Executive Board
IFF:	Identification, Friend or Foe
IG:	Inspector General

IMIP:	Industrial Modernization Incentives Program
INF:	Intermediate-Range Nuclear Forces
IRR:	Individual Ready Reserve
ITSS:	Integrated Tactical Surveillance System
IUS:	Inertial Upper Stage

JCS:	Joint Chiefs of Staff
JCSE:	Joint Communications Support Element
Joint STARS:	Joint Surveillance and Target Attack Radar System
JSEAD:	Joint Suppression of Enemy Air Defenses
JTACMS:	Joint Tactical Missile System
JTF:	Joint Tactical Fusion
JTIDS:	Joint Tactical Information Distribution System
JVX:	Joint Services Advanced Vertical Lift Aircraft

LAMPS:	Light Airborne Multipurpose System
LANTIRN:	Low-Altitude Navigation and Targeting Infrared System for Night
LAV:	Light Armored Vehicle
LCAC:	Landing Craft, Air Cushion
LF:	Low Frequency
LOC:	Line of Communication
LOGMARS:	Logistic Applications of Automated Marking and Reading Symbols
LRINF	Longer-Range Intermediate-Range Nuclear Forces
LVS:	Logistics Vehicle System
LVT:	Assault Amphibian Vehicle

MAB:	Marine Amphibious Brigade
MAC:	Military Airlift Command
MAF:	Marine Amphibious Force
MAP:	Military Assistance Program
MARAD:	Maritime Administration
MBA:	Military Bases Agreement
MBFR:	Mutual and Balanced Force Reductions
MC:	Mission Capable
MCS:	Maneuver Control System
MCTL:	Military Critical Technology List
MiG:	Mikoyan-Gurevich (aircraft)
MILCON:	Military Construction
MILSTAR:	Military Strategic and Tactical Relay System
MIRV:	Multiple Independently-Targetable Reentry Vehicle
MLRS:	Multiple-Launch Rocket System
MMP:	Master Mobilization Plan
MMWG:	Military Mobilization Working Group
MOA:	Memorandum of Agreement
MOB:	Main Operating Base
MPS:	Maritime Prepositioning Ship
MRP:	Master Restationing Plan
MRR:	Materiel Readiness Report
MSC:	Military Sealift Command
MTC:	Military Transportation Command
MTIR:	Moving Target Indicator
MULE:	Modular Universal Laser Equipment

NAA:	North Atlantic Assembly
NATO:	North Atlantic Treaty Organization
NAVSTAR:	Navigation Satellite Timing and Ranging
NCA:	National Command Authorities
NEARTIP:	Near-Term Improvement Program (for MK-46 torpedo)
NEXRAD:	Next Generation Weather Radar
NFIP:	National Foreign Intelligence Program
NMCC:	National Military Command Center
NORAD:	North American Aerospace Defense Command
NPG:	Nuclear Planning Group
NPS:	Non-Prior Service
NRF:	Naval Reserve Fleet
NTPF:	Near-Term Prepositioning Forces
NTU:	New Threat Upgrade

OJCS:	Organization of the Joint Chiefs of Staff
OMB:	Office of Management and Budget
OMG:	Operational Maneuver Group
OSD:	Office of the Secretary of Defense
OTH:	Over-the-Horizon
OTH-B:	Over-the-Horizon Backscatter (radar)

PAA:	Primary Aircraft Authorized
PACCS:	Post Attack Command Control System
PACOM:	Pacific Command
PARCS:	Perimeter Acquisition Radar Attack Characterization System
PAVE PAWS:	Phased-Array Radars
PCS:	Permanent Change of Station
PECI:	Productivity Enhancing Capital Investments
PEP:	Productivity Engineering and Planning
PIF:	Productivity Investment Fund
PIVADS:	Product Improvement Vulcan Air Defense System
PJK:	PLRS/JTIDS Hybrid System
PLSS:	Precision Location Strike System
POL:	Petroleum, Oil, and Lubricants
POMCUS:	Prepositioning of Overseas Materiel Configured to Unit Sets
PPBS:	Planning, Programming, and Budgeting System
PPS:	Post Production Support
PRC:	People's Republic of China
PRIMUS:	Physician Reservists in Medical Universities and Schools

R&D:	Research and Development
RAM:	Rolling Airframe Missile
RAP:	Rocket-Assisted Projectile
RCM:	Reliability Centered Maintenance
RDSS:	Rapidly Deployable Surveillance System
RDT&E:	Research, Development, Test, and Evaluation
REFLEX:	Reserve Flexibility
ROK:	Republic of Korea
ROPMA:	Reserve Officer Personnel Management Act
RPMA:	Real Property Maintenance Activities
RPV:	Remotely Piloted Vehicle
RRF:	Ready Reserve Force

S&T:	Science and Technology
SAC:	Strategic Air Command
SACEUR:	Supreme Allied Commander, Europe
SACLANT:	Supreme Allied Commander, Atlantic
SALT:	Strategic Arms Limitation Treaty
SAM:	Surface-to-Air Missile
SDI:	Strategic Defense Initiative
SEAD:	Suppression of Enemy Air Defenses
SHF:	Super High Frequency
SHORAD:	Short-Range Air Defense
SHORAD C^2:	Short-Range Air Defense Command and Control
SIGINT:	Signals Intelligence
SINCGARS:	Single-Channel Ground and Airborne System
SINCGARS-V:	Single-Channel Ground and Airborne System, VHF
SLBM:	Submarine-Launched Ballistic Missile
SLCM:	Sea-Launched Cruise Missile
SLEP:	Service Life Extension Program
SLMM:	Submarine-Launched Mobile Mine
SNF:	Short-Range Nuclear Forces
SOF:	Special Operations Forces
SOTAS:	Standoff Target Acquisition System
SPF:	Strategic Projection Force
SRAM:	Short-Range Attack Missile
SSBN:	Ballistic Missile Submarine, Nuclear-powered
SSGN:	Cruise Missile Submarine, Nuclear-powered
SSN:	Submarine, Nuclear-powered
STARS:	Software Technology for Adaptable Reliable Systems
START:	Strategic Arms Reduction Talks
Su:	Sukhoy (aircraft)
SUBACS:	Submarine Advanced Combat System
SURTASS:	Surveillance Towed-Array Sonar System
SVIP:	Secure Voice Improvement Program
SWA:	Southwest Asia

T&E:	Test and Evaluation
TACAMO:	Airborne Strategic Communications System
TACS:	Auxiliary Crane Ship
TACTAS:	Tactical Towed-Array Sonar
TARPS:	Tactical Air Reconnaissance Pod System
TESS:	Tactical Environment Support System
TFW:	Tactical Fighter Wing
TGSM:	Terminally-guided Submunition
TIARA:	Tactical Intelligence and Related Activities
TOA:	Total Obligational Authority
TOW:	Tube-Launched Optically-Tracked Wire-Guided (antitank missile)
TRAM:	Target Recognition Attack Multi-Sensor
TRITAC:	Joint Tactical Communications Program

UHF:	Ultra-High Frequency
UNITREP:	Unit Status and Identify Report
USCENTCOM:	U.S. Central Command
USCINCCENT:	Commander-in-Chief, U.S. Central Command
USCINCEUR:	U.S. Commander-in-Chief, European Command
USCINCLANT:	Commander-in-Chief, U.S. Atlantic Command
USCINCPAC:	Commander-in-Chief, U.S. Pacific Command
USSR:	Union of Soviet Socialist Republics

VHF:	Very High Frequency
VHSIC:	Very High Speed Integrated Circuit
VLA:	Vertical Launch ASROC
VLF:	Very Low Frequency
VLS:	Vertical Launch System
V/STOL:	Vertical/Short Take-off and Landing

WAAM:	Wide Area Antiarmor Munition
WARMAPS:	Wartime Manpower Planning System
WIN:	WWMCCS Intercomputer Network
WIS:	WWMCCS Information Systems
WRM:	War Reserve Munitions

UNITED STATES MILITARY POSTURE FOR FY 1985

Prepared by

THE ORGANIZATION OF THE JOINT CHIEFS OF STAFF

PREFACE

The primary purpose of this statement on the military posture of the United States is to supplement testimony by the Chairman of the Joint Chiefs of Staff and members of the Organization of the Joint Chiefs of Staff at congressional hearings in support of the Fiscal Year 1985 Defense Budget.

Chapter I is an overview which describes the main challenges to US national security, outlines objectives and ingredients of US military strategy, and highlights continuing efforts to field the best possible armed forces for the protection of US national interests.

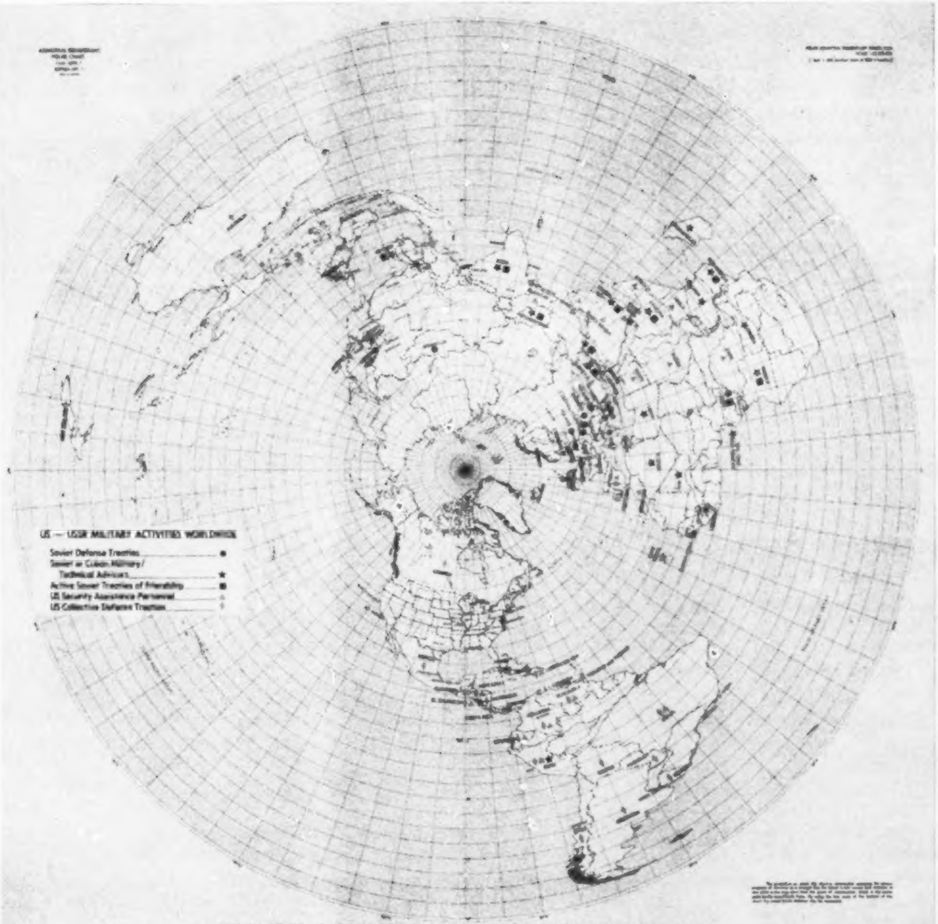
Chapter II compares US defense requirements and resource commitments with those of the Soviet Union.

Chapter III assesses the current and projected capability of the US Armed Forces to meet the Soviet nuclear threat.

Chapter IV assesses the current and projected capability of US Armed Forces, in concert with friends and allies, to meet the Soviet conventional military threat. This chapter examines types of forces and their regional applications.

Chapter V addresses other selected topics of interest.

Boundary representations are not necessarily authoritative. The United States does not recognize the incorporation of Estonia, Latvia, and Lithuania into the Soviet Union.


US — USSR MILITARY ACTIVITIES WORLDWIDE
Soviet Defense Treaties ●
Soviet or Cuban Military/ Technical Advisors ★
Active Soviet Treaties of Friendship ■
US Security Assistance Personnel △
US Collective Defense Treaties †

MAP 1-1

CHAPTER I. SECURITY CHALLENGES AND THE MILITARY POSTURE

INTRODUCTION

The basic objective of the US Armed Forces is to help preserve the United States as a free nation, with its fundamental institutions and values intact. US forces have been called upon, therefore, to help assure the physical security of the United States and contribute to the shaping of an international environment in which US interests are protected. These objectives require a strong US military posture, one that provides a credible deterrent across the entire spectrum of conflict. Over the past year, US forces have continued to grow in strength and readiness, and programs have been set in motion to increase their capabilities further in the years ahead.

MILITARY POSTURE AND GLOBAL REALITIES

The United States has interests on a global scale and long-standing commitments to other nations. Interests of the United States, its allies, and friends continue to be challenged by threats of great scope and urgency. These threats arise from the sustained growth of Soviet military power, Eastern Bloc and surrogate exploitation of regional conflicts, and instabilities that abound in many areas of the world.

The Soviets continue to modernize their strategic nuclear forces. They have also strengthened their theater nuclear and conventional forces, and they have developed capabilities for projecting military power beyond their borders. Together with clients and surrogates, the Soviets are attempting to weaken the ties between the United States and its allies and establish their own patterns of influence throughout much of the Third World. Soviet military power and the projection of that power threaten Free World interests and US alliances, impede the peaceful resolution of Third World problems, and contribute to regional instability in ways that promote wider conflict.

The US military strategy seeks to deter attacks against the United States and its allies, limit the Soviet capability for coercion through military power, and provide the National Command Authorities (NCA) the flexibility to respond appropriately and effectively to any level of aggression. Therefore, US forces must be capable of meeting regional demands and threats of a global dimension — now and into the future.

The adequacy of the US Armed Forces must be measured against national security requirements and growing threats to US interests. Such an assessment provides the basis for this statement on the US military posture.

Global Considerations

US interests are best pursued within a stable, peaceful international community. Regional instabilities and other threats create complex and interrelated requirements for US military forces. Conflicts anywhere in the world immediately affect the United States and its allies, and have the potential for global implications. These challenges require collective approaches to security and combined efforts to help eliminate sources of instability.

The Soviet Union continues its efforts to influence international events, using military power as its principal tool. Map I-1 shows the large Soviet network of access and presence. This network facilitates both the overt and covert introduction of Soviet equipment and personnel — or surrogate forces — into regions of instability.

The Soviet buildup of nuclear and conventional forces, pursued in the face of US and allied restraint, has global significance. Soviet military capabilities put great pressure on US and allied strategies of deterrence and pose a major threat to international stability. The United States and Soviet Union could inflict unprecedented damage on each other by the use of strategic nuclear forces. However, the Soviets have now developed strategic offensive and defensive capabilities that erode the credibility of the US deterrent and increase the risk that Soviet leaders would consider launching a surprise nuclear attack. At the very least, Soviet advantages increase their coercive power, while decreasing the options available to US and allied leaders during confrontations with Soviet power. The Soviets depend heavily on military capabilities to support their policies toward the North Atlantic Treaty Organization (NATO). Soviet military power is also used to maintain the pressures essential to Warsaw Pact cohesion, intervene in the affairs of neighboring nations, support surrogate activities, and threaten others.

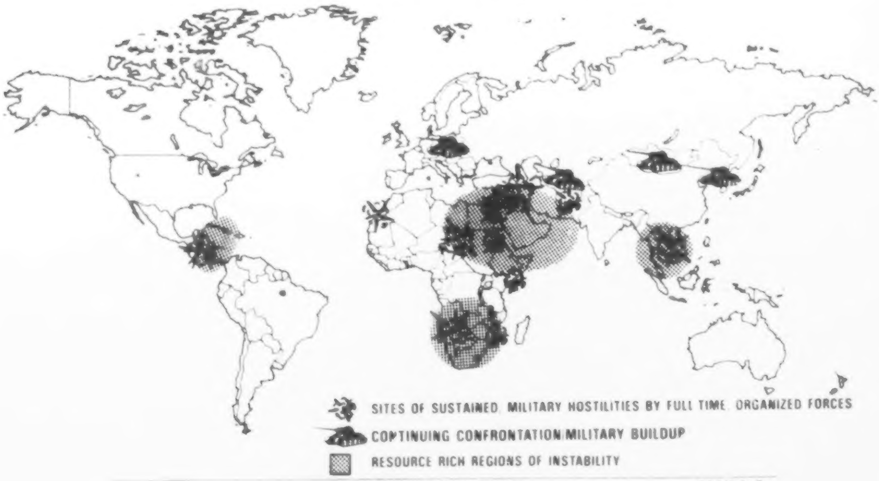
The following sections provide an overview of US interests, threats to these interests, and general strategic approaches to various regions of the world. Although the regions mentioned differ in many respects, the interrelationship of events among them requires that US security efforts in one area be evaluated to determine the potential impact on other regions. US interests, international influences, and resource availability will often require the establishment of priorities in the fulfillment of security tasks.

Regional Considerations

Instability in underdeveloped areas of the world is a reality of the 1980s. This instability increases the difficulty in dealing constructively with development problems. Turmoil in these regions also threatens the flow of resources among nations and provides the Soviet Union opportunities to expand its influence at the expense of the Free World. Instability is most prevalent in the developing nations of the Central American-Caribbean region, southern Africa, Southeast Asia, and the area stretching from Libya to Afghanistan. Map I-2 identifies areas where instability was accompanied by major military conflicts during 1983. Nations within these regions are confronted by social, economic, and political problems that defy easy solution and often lead to insurgency and intraregional strife. Each of these regions has resources essential to the well-being of many nations, and, in most cases, is adjacent to vital lines of communication. Terrorism, possible nuclear proliferation, and externally supported aggression are endemic to these areas and represent potential threats to US security. For example, a disruption in the flow of vital resources and commerce among nations would have enormous economic and political effects on the Free World.

Modern weapons and means of communication provide the potential for confrontations to spread in scope and intensity. Intraregional conflict has special importance because it poses considerable risk of involving both neighboring nations and major powers outside the area. The United States must stand ready, with other nations, to deter such violence or limit conflicts should deterrence fail.

POTENTIAL SOURCES OF CONFLICT


SITES OF SUSTAINED MILITARY HOSTILITIES BY FULL TIME ORGANIZED FORCES
CONTINUING CONFRONTATION/MILITARY BUILDUP
RESOURCE RICH REGIONS OF INSTABILITY

AS OF 1 JANUARY 1984

MAP I-2

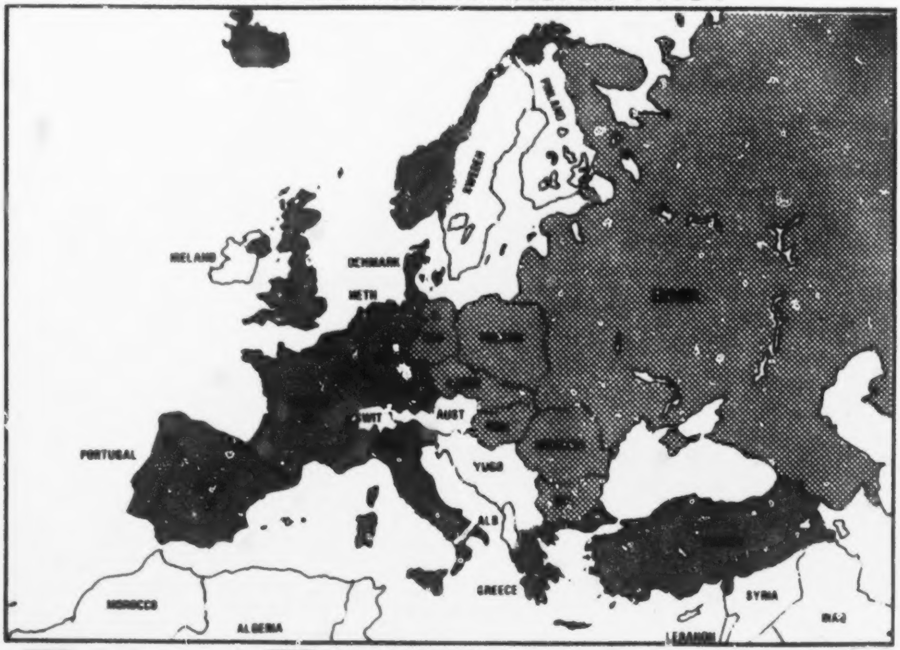
Western Europe, NATO, and the Warsaw Pact

Of all overseas regions, Europe remains the most important to the security of the United States. The United States is firmly committed to NATO (Map I-3) and maintains strong forward-deployed forces in Europe and the adjacent seas as evidence of its determination to do whatever is necessary to deter attacks on the Alliance or restore allied territorial integrity in the event of aggression. The security of NATO depends on the ability of the United States and its allies to maintain a full range of conventional and nuclear forces. To maintain a credible conventional defense capability, the Alliance must be able to reinforce forward-deployed forces rapidly and apply its significant advantages in resources, technology, and cohesion productively. Chapter IV contains a detailed discussion of the military balance in Europe.

Middle East and Southwest Asia

US strategic interests in the Middle East and Southwest Asia center on oil resources. The United States is committed to regional stability and the reduction of tensions that carry risks of wider involvement by the major

WESTERN EUROPE, NATO AND THE WARSAW PACT



■ NATO ▨ WARSAW PACT

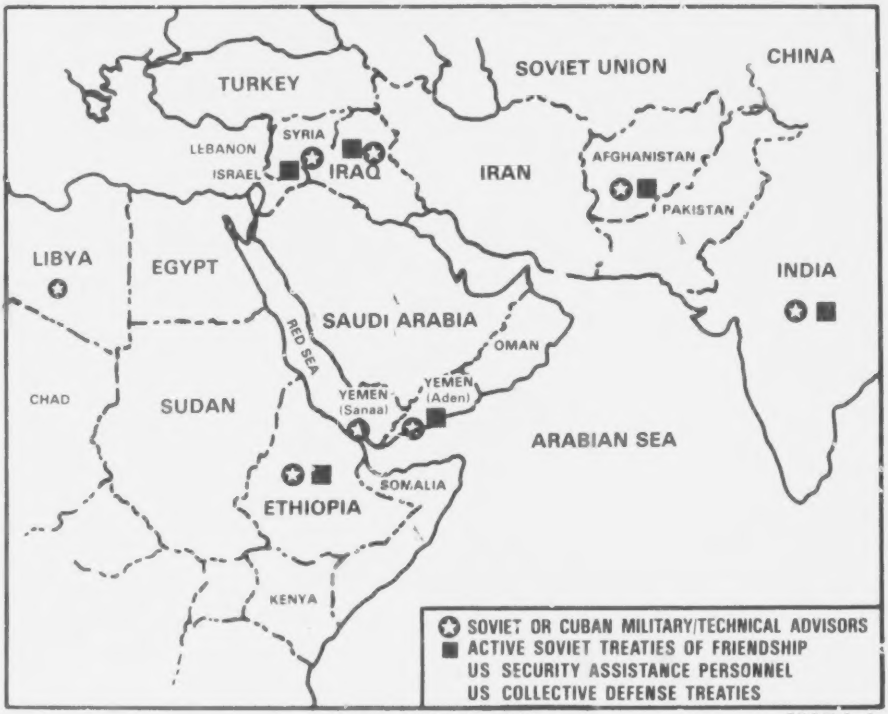
* DOES NOT PARTICIPATE IN INTEGRATED MILITARY STRUCTURE

AS OF 1 JANUARY 1984

MAP I-3

powers. To accomplish these goals, the United States is involved in diplomatic initiatives, selected military assistance, and multinational peacekeeping efforts to strengthen friendly regional states and limit Soviet influence in the area (Map I-4). In recognition of major external threats, the United States has initiated programs to improve its capability for deploying significant US forces to the region should the need arise. Frequent exercises are conducted to enhance this capability. A forward-deployed headquarters element afloat and the presence of naval forces in the area demonstrate US resolve. Chapter IV contains a further discussion of the military situation in the region.

MIDDLE EAST AND SOUTHWEST ASIA


TURKEY
SOVIET UNION
CHINA
SYRIA
LEBANON
ISRAEL
IRAQ
IRAN
AFGHANISTAN
PAKISTAN
LIBYA
EGYPT
INDIA
SAUDI ARABIA
RED SEA
OMAN
YEMEN (Aden)
YEMEN (Sanaa)
CHAD
SUDAN
ARABIAN SEA
SOMALIA
ETHIOPIA
KENYA
✪ SOVIET OR CUBAN MILITARY/TECHNICAL ADVISORS
■ ACTIVE SOVIET TREATIES OF FRIENDSHIP
US SECURITY ASSISTANCE PERSONNEL
US COLLECTIVE DEFENSE TREATIES

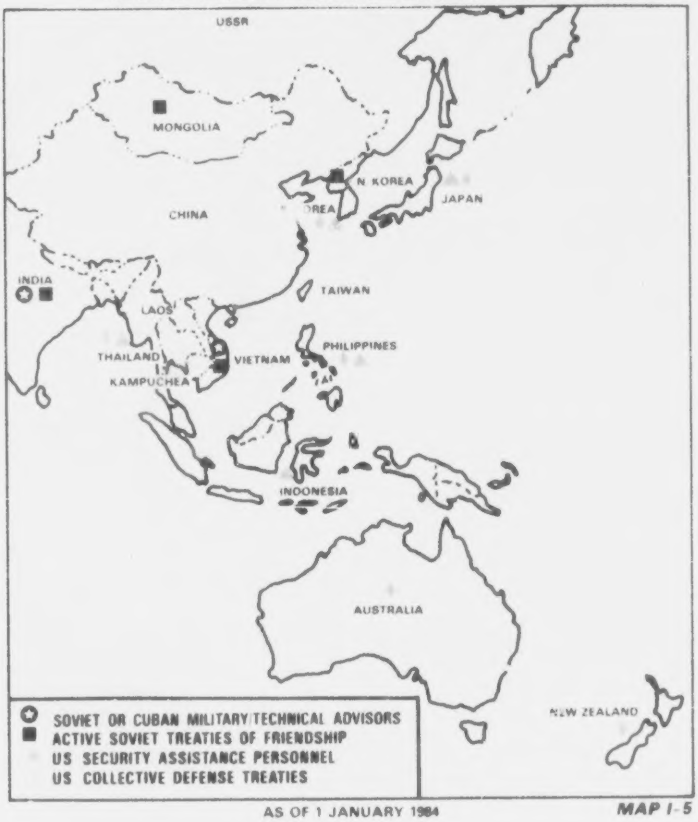
AS OF 1 JANUARY 1984

MAP I-4

Pacific and East Asia

The United States has major security interests in the Pacific and East Asian areas. These interests include promoting regional stability and progress, strengthening collective defense with allies, and maintaining important economic ties. Soviet military capabilities in the region continue to improve, providing greater opportunities for the Soviets to exert their influence. The Soviets have expanded their naval presence and strengthened their overall warfighting capabilities. North Korea and the Socialist Republic of Vietnam, supported by Soviet assistance, remain major sources of instability within the region (Map I-5). The protection of US and allied interests in the Pacific and East Asian region continues to require highly capable forward-deployed air, ground, and naval forces and the ability to reinforce those forces quickly. Chapter IV contains a further discussion of the military balance in Asia.

EAST ASIA AND THE PACIFIC


USSR
MONGOLIA
CHINA
N KOREA
OREA
JAPAN
INDIA
TAIWAN
LAOS
THAILAND
KAMPUCHEA
VIETNAM
PHILIPPINES
INDONESIA
AUSTRALIA
NEW ZEALAND
○ SOVIET OR CUBAN MILITARY/TECHNICAL ADVISORS
■ ACTIVE SOVIET TREATIES OF FRIENDSHIP
US SECURITY ASSISTANCE PERSONNEL
US COLLECTIVE DEFENSE TREATIES

AS OF 1 JANUARY 1984

MAP I-5

Latin America

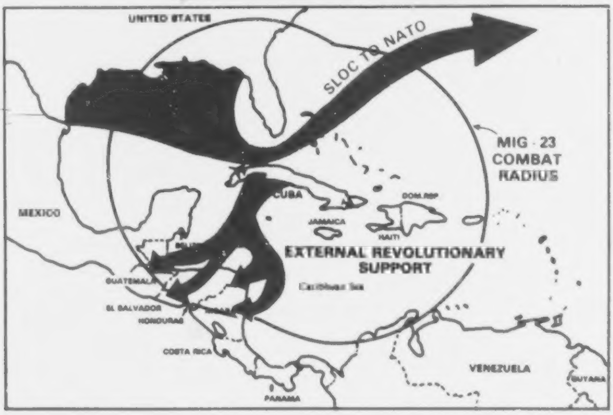
A secure Western Hemisphere can no longer be taken for granted. Threats to individual nations affect the security of the entire region. Events in Central America, the Caribbean, and South America are particularly important in assessing US security because of their proximity. Economically, nearly half of the US seaborne trade passes through the Caribbean, including half of all crude oil imports. Militarily, a large percentage of NATO's reinforcements and resupply for a European war must pass through the Florida Strait (Map I-6). Instabilities and conflicts in this region could divert US attention and resources from other areas of the world.

The forces of change are active in Latin America. Regional instability offers the Soviet Union and Cuba opportunities to exploit regional social, political, and economic problems. Cuba, armed and supported economically by the Soviet Union, contributes to the spread of insurgency, revolution, and discord in the region and could hamper the US response to NATO reinforcement requirements in time of crisis. The major issue affecting US security interests in Latin America is the unresolved conflict in El Salvador, where leftist insurgents are receiving external aid and encouragement, primarily from Cuba and Nicaragua. Recent events in Grenada also showed the intensity of Cuban efforts to exert influence throughout the region. Grenada is discussed in greater detail in Chapter V.

Soviet presence in the region has increased and now includes 2,500 military advisors, 7,000 civilian advisors, and a 3,000-man combat brigade in Cuba. The Soviets conduct naval exercises in the Caribbean and their naval combatants, auxiliary ships, and merchant ships regularly call at Cuban ports. The introduction of Soviet materiel and Cuban military personnel into Nicaragua has made that country the strongest military power in Central America. Soviet, East German, and Palestine Liberation Organization (PLO) military and security advisors have helped the Sandinistas consolidate their power in Nicaragua. Soviet military assistance to Cuba and Nicaragua is ten times that provided to all of Latin America by the United States.

The United States must strengthen its relations with all nations in Latin America to protect its security interests. The United States must demonstrate that it is a reliable security partner by helping friends and allies deter and defeat insurgencies, and by developing combined military capabilities and contingency plans with selected countries. Relationships with Latin American countries should be built on mutual interests. Greater security assistance and expanded military-to-military contacts will be essential to develop regional defensive capabilities and conditions under which progress can be made in political, economic, and social development.

CARIBBEAN BASIN



UNCLASSIFIED AS OF 1 JANUARY 1984 MAP I-6

Africa

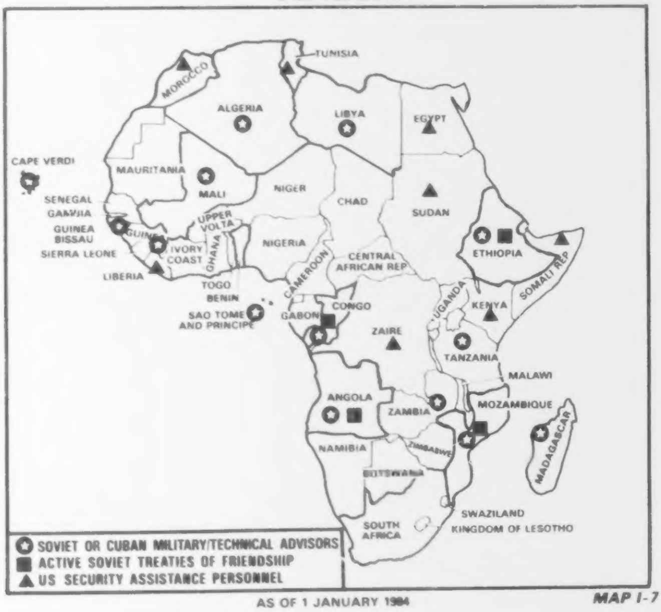
Many African nations have resources essential to Western nations. Some also possess transit facilities of military value to the United States in the event of a crisis in Southwest Asia, and some have societies vulnerable to influence by the Soviet Union and its surrogates (Map I-7). In the Horn of Africa, conflicting territorial claims by Somalia and Ethiopia perpetuate distrust and conflict. Tension in the Horn is further exacerbated by internal Ethiopian insurgencies and by the presence in that country of three Cuban brigades and approximately 1,800 Soviet advisors. In southern Africa, confrontation between the Republic of South Africa and its neighbors continues. The presence of nearly 30,000 Cuban military personnel and 500 Soviet advisors in a divided Angola represents a major obstacle to peace in the region. In northern Africa, Libya and Algeria continue their support of Polisario insurgent efforts against Morocco in a conflict over the Western Sahara. Libyan efforts to destabilize the region have attained some success in Chad and Upper Volta.

Direct military threats to US interests in Africa are not substantial, but expansion of anti-Western influence would be harmful. The United States and Western European nations will need to provide military assistance on a selective basis to African friends and allies.

Implications for US Strategy and Forces

Military strategy must be designed to meet the challenges to US security interests. The interrelated factors of Soviet-American competition, relative strengths of major nations, global military balance, and current regional military situations must be considered in any formulation of strategy and the forces to support it. It is clear that US military strategy and force levels must be adequate to confront a wide range of challenges, from low-intensity conflict in remote regions to threats of wider scope involving modern conventional and nuclear forces.

AFRICA


TUNISIA
MOROCCO
ALGERIA
LIBYA
EGYPT
CAPE VERDI
MAURITANIA
MALI
NIGER
CHAD
SUDAN
SENEGAL
GAMBIA
GUINEA BISSAU
GUINEA
SIERRA LEONE
LIBERIA
IVORY COAST
GHANA
UPPER VOLTA
NIGERIA
TOGO
BENIN
CAMEROON
CENTRAL AFRICAN REP
ETHIOPIA
SOMALI REP
SAO TOME AND PRINCIPE
GABON
CONGO
UGANDA
KENYA
ZAIRE
TANZANIA
MALAWI
ANGOLA
ZAMBIA
MOZAMBIQUE
MADAGASCAR
NAMIBIA
ZIMBABWE
BOTSWANA
SOUTH AFRICA
SWAZILAND
KINGDOM OF LESOTHO
✪ SOVIET OR CUBAN MILITARY/TECHNICAL ADVISORS
■ ACTIVE SOVIET TREATIES OF FRIENDSHIP
▲ US SECURITY ASSISTANCE PERSONNEL

AS OF 1 JANUARY 1984

MAP I-7

US MILITARY STRATEGY

The US security requirements summarized above form the basis for US military strategy, which is designed to support the more comprehensive national security strategy — a strategy that takes into account all elements of the nation's strength, not just its military capabilities.

Continuity of Purpose

Since World War II, the US military strategy has had a constant purpose — to deter war while maintaining a secure environment within which the United States, its allies, and friends can pursue legitimate interests. This strategy of deterrence is rooted in a national commitment to peace. For years, US deterrent capabilities have helped prevent direct attacks upon the United States and its allies. The United States has also sought to prevent lower levels of conflict by encouraging the development of adequate local forces through security assistance programs and aid from other friendly nations.

Ingredients of the Strategy

The fundamental ingredients of US military strategy are nuclear deterrence with arms control, strong alliances, forward-deployed forces, central reserves, force mobility, freedom of the seas and space, command and control, and intelligence.

Nuclear Deterrence and Arms Control

The role of US nuclear forces is to remove all incentive for direct attack against the United States and its allies by ensuring any attacker an unacceptable outcome. The Soviet Union is challenging the US guarantee of effective retaliation by gaining advantages in certain measures of nuclear strength, thereby threatening the deterrent strategy. To counter the growing Soviet nuclear warfighting potential, the United States has given high priority to the modernization of its strategic nuclear forces and the study of means for defending against strategic nuclear attack. Equitable and verifiable arms reduction agreements are being pursued in parallel with modernization programs. Such agreements could contribute to the security of the United States and its allies by helping to create a more stable nuclear balance at lower levels of armament.

Strong Alliances

US military strategy is based on a system of strong alliances. The shared values and combined economic strength of the advanced industrial countries provide a firm basis for effective collective security among the NATO nations and US allies elsewhere. The cohesion of US collective security arrangements requires understanding that the interests of the United States and its allies may not always be the same. Nevertheless, US alliances are more reliable than those of the Soviet Union because they are built on mutual trust, common purpose, and strong commitment. Most US allies have no counter to Soviet nuclear power. Therefore, the alliance element of US strategy — critical to dealing with conventional warfare threats to the United States and friendly nations — functions against the backdrop of US nuclear deterrence.

Experience has shown that war cannot be deterred with strategic nuclear weapons alone. In this period of rough nuclear parity between the United States and Soviet Union, conventional military forces become increasingly important. The Warsaw Pact has fielded large, combined-arms armies with modern conventional and nonstrategic nuclear weapons. The United States alone does not match these forces in numbers. The allies make a significant contribution to deterrence by providing weaponry, well-trained manpower, facilities, and control of key geographical areas, thereby improving the ability to meet Soviet challenges.

Forward-Deployed Forces

Forward-deployed military forces are a key factor in the success of US alliances. These forces demonstrate to allies the US commitment to the common defense; to the Soviets, they serve notice that an attack will be met immediately by US opposition. In the event of attack, forward deployment insures that the entire allied force can immediately conduct defensive operations and establish conditions which allow reinforcements to be received. In peacetime, the American pressence among allies reduces the coercive potential of visible Soviet military threats.

Central Reserves

The majority of US military forces are based in the United States, including most of the strategic nuclear forces and the conventional forces — both active and reserve. These forces contribute to deterrence of major conflict, provide a capability to reinforce and sustain forward-deployed forces, and help deter or contain conflict where there is no permanent US military presence.

Force Mobility

Adequate airlift and sealift are essential to the flexibility needed for reaction to threats against US interests. Overflight arrangements and access rights to overseas airfields and ports contribute to deployment flexibility and efficiency. The pre-positioning of supplies and equipment in certain areas and host nation support are also important components of US reinforcement capabilities.

Freedom of the Seas and Space

Freedom of the seas is important to US strategy because it allows maritime support and reinforcement of forward-deployed forces, enables US and allied naval forces to operate worldwide, and insures uninterrupted commerce for the nation.

Freedom to operate in space is a modern military requisite. The United States depends heavily on satellites for such missions as early warning of missile attack, surveillance, and command and control. Technological superiority in the military applications of space is important to insure uninterrupted US use of key space assets.

Command and Control

Effective command and control is imperative to successful employment of military forces. Command and control systems provide the essential link among the National Command Authorities (NCA), Joint Chiefs of Staff (JCS), and commanders in the field. Supporting systems that operate effectively during all phases of conflict add to deterrence and are vital should deterrence fail.

Intelligence

The US defensive strategy depends heavily on accurate and timely intelligence for warning and effective employment of military forces. Such intelligence increases the likelihood that forward-deployed and reinforcing forces will deter conflict or defend successfully, and maximizes the capabilities of modern weapon systems.

Applying the Strategy

US forces are not available to defend simultaneously against every threat with equal strength. Nonetheless, the United States must make it clear that its interests will be defended and obligations to allies met. US force employment planning considers the fundamental tasks that must be accomplished, while retaining the flexibility to meet other contingencies that threaten US security interests. General strategic priorities, specific circumstances, and force availability will govern employment of US forces. General strategic priorities also influence planning for the improvement of forces in the future.

Sound military doctrine is essential to the successful implementation of US strategic concepts. Joint doctrine ties together the capabilities of the different military Services, guiding both the employment and development of forces. Effective joint doctrine helps prevent duplication and gaps in Service capabilities and provides guidelines that smooth the translation of plans into execution.

The US strategy is designed to capitalize on the enduring strengths of the United States — its political and social values, diversified economy, advanced technology, and ingenuity of its people. To succeed, the strategy requires adaptability to a changing world and the help of supportive allies.

PREPARING FOR THE FUTURE

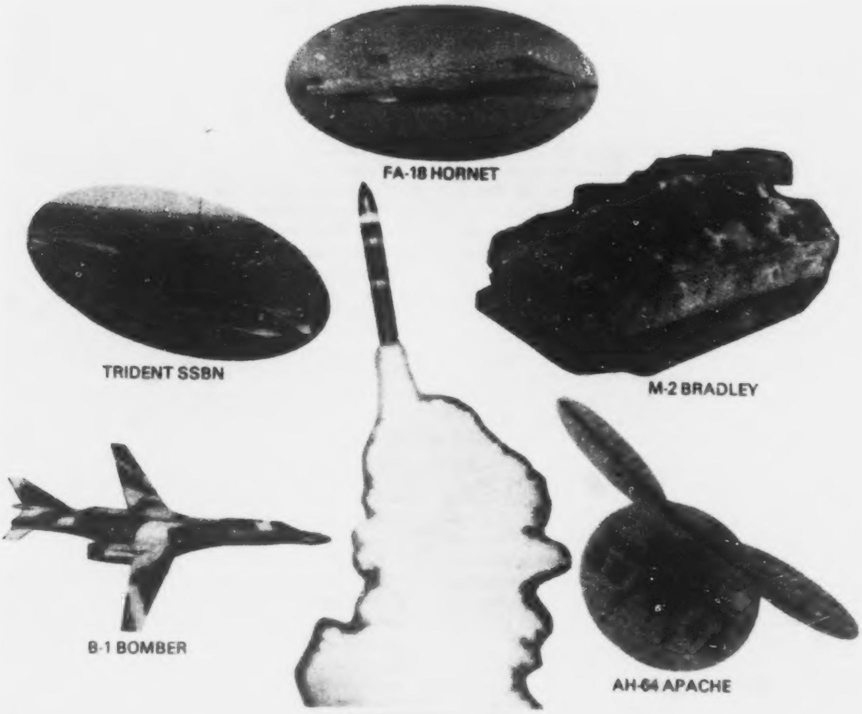
A much-needed improvement in US military forces has occurred over the past several years. The American public has supported increased defense budgets, and a variety of essential programs have borne fruit. Combat readiness improved as funds became available for more training, better maintenance, increased stockpiling of supplies, and accelerated introduction of modern weapons. The cornerstone of this healthier force has been its people. The high quality of today's force is due, in large measure, to renewed patriotism. More realistic pay and allowances have also contributed significantly. The morale and professional skill of American servicemen and women are high. The United States has never fielded better forces in peacetime.

The proposed defense program for Fiscal Year (FY) 1985 will continue the momentum of the past three years by improving the modernization, readiness, sustainability, and manning of our forces.

The United States has placed a high priority on modernizing its strategic forces. This broad effort includes making command and control systems more survivable, conducting research on better strategic defenses, and improving all legs of the TRIAD. The development and deployment of the PEACEKEEPER missile, TRIDENT submarine systems, B-1B and Advanced Technology Bomber (ATB), air-launched cruise missile (ALCM), and a new small, single warhead intercontinental ballistic missile (ICBM) will help insure the US strategic deterrent. These nuclear weapons modernization programs are essential both for deterrence and to insure meaningful arms reduction negotiations.

Nonstrategic nuclear force modernization continues with the fielding of PERSHING II, modernized field artillery warheads, and ground-launched cruise missiles (GLCM). Improved command, control, and communications will increase the safety, flexibility, and deterrent capability of deployed theater forces.

The modernization of conventional forces and the chemical deterrent are other objectives of the defense modernization program. Land forces are being reorganized to improve flexibility and maximize the effectiveness of newly introduced weapons, such as the



ABRAMS tank, BRADLEY fighting vehicle, APACHE helicopter, and Multiple-Launch Rocket System (MLRS). As a result of these organizational improvements, the Army's 16 active and 8 reserve divisions will be restructured to 17 active and 9 reserve divisions during 1984. The United States continues to build toward a 600-ship Navy with 15 carrier battle groups, four battleship surface action groups, modernized attack submarines, sealift for Army forces, and amphibious lift for Marine amphibious forces. Additionally, more capable combat aircraft and modernized munitions are being obtained to build and strengthen an Air Force of 40 tactical fighter wing equivalents. These programs, together with new maritime pre-positioning ships, forthcoming increases in strategic airlift and sealift, and improvements in special operations forces, will enhance the readiness posture of US forces and their sustainability.

Since good people are critical to successful implementation of the US military strategy, Service manpower programs are aimed at recruiting and retaining people who have the aptitude and motivation to operate and maintain modern weapon systems.

The programs initiated to restore US military strength must be continued. Constant, sustained attention and support are required to maintain quality combat forces. The American people rightly expect to spend no more than is necessary on defense. Short-term attempts to economize on military investment usually lead to higher costs in the future.

CHAPTER II. STRATEGIC REQUIREMENTS AND RESOURCE COMMITMENTS

INTRODUCTION

The US military strategy requires resources to maintain the forces in readiness, prepare for the future, and provide a recognized ability to mobilize additional assets rapidly should the need occur. The US Armed Forces must be supported, therefore, by an efficient, effective national resource base. This chapter highlights the US and Soviet resource bases that support military requirements and compares allocation trends.

The Soviet Union allocates a large percentage of its economic resources to military requirements. The heavy Soviet investment in nuclear and conventional forces provides evidence of the high priority Soviet leaders place on the security of their homeland and party structure and on military assets for power projection. The United States devotes relatively fewer resources to military requirements. US requirements also derive from a global perspective, but reflect a distinctive defensive character.

Differences in global objectives do not explain fully the disparity in Soviet and US emphasis on defense spending. Structural differences in economies have a major bearing on the ability of each nation to support military forces. The Soviet system of central planning has led to a weaker economy overall, but has allowed greater focus to be placed on areas of priority. The Soviet defense industry has been given first priority. Thus, even with a smaller economic base than the United States, the USSR can direct more peacetime resources to military requirements.

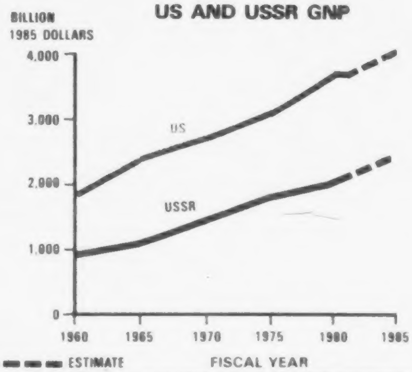
RESOURCE BASE TO SUPPORT NATIONAL OBJECTIVES

Overview

A nation's economy must be strong to support its national security objectives. The industrial base must have both the capacity to produce the types and quantities of military equipment required and a source of required materials. Further, the industrial base must be responsive to critical wartime needs and be able to respond to surge requirements. In addition, there must be an adequate population base to provide the skilled labor to support the production base and to meet the manpower requirements of the armed forces. The United States, in particular, must maintain a strong technology base to increase productivity and equip its forces with qualitatively superior weapons. These capabilities, discussed below, are essential to the maintenance of a strong US military posture.

Economic Support

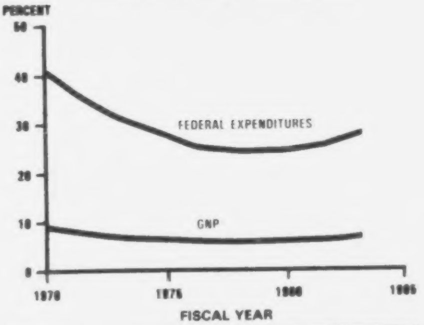
The economic strengths of the United States and the Soviet Union can be compared by examining their gross national products (GNP). Chart II-1 shows that the US GNP is more than 80 percent higher than that of the Soviet Union. Further, the gap between the two nations' GNPs has continued to widen in favor of the United States. Thus, the United States has a greater potential for supporting defense spending.


US AND USSR GNP

UNCLASSIFIED AS OF 1 JANUARY 1984 CHART II-1

Chart II-2 shows that actual federal spending during the 1970s continued the trend begun two decades earlier — that of a growing federal budget, but a decreasing percentage of that budget for defense. By 1978, defense spending dropped to less than five percent of GNP. This downward trend in the defense share of federal spending has been reversed during the past three years.

US DEFENSE EXPENDITURES
PERCENTAGE OF GNP
AND FEDERAL EXPENDITURES



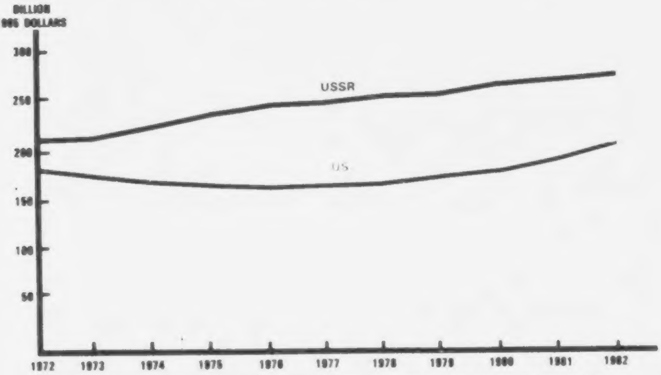
AS OF 1 JANUARY 1984 *CHART II-2*

The Soviet Union has steadily increased its defense expenditures in both relative and absolute terms since the 1950s, despite well-known economic difficulties. Defense allocations rose from 12-13 percent of the Soviet GNP in 1972 to an estimated 15 percent in 1983, even though growth rates of the Soviet economy, expressed as GNP, slowed in the 1970s, as did those of most developed nations.

Chart II-3 compares US defense spending from 1972 to 1982 with the equivalent dollar cost of Soviet military activities — an estimate of what it would cost the United States to develop, procure, and operate the Soviet military equipment. These estimates necessarily reflect a degree of uncertainty.

From 1972 to 1982, the estimated cumulative dollar costs of Soviet defense activities exceeded US defense outlays by about 45 percent. As shown in Chart II-4, the difference is more striking when the comparison between US and estimated Soviet outlays is made by mission areas. During the past 10 years, the Soviets spent more than three times as much as the United States on strategic forces and about one and one-half times as much on general purpose forces (conventional and nonstrategic nuclear forces). The Soviet inventory of weapons has become much larger than that of the United States, and the average age of their weapons has decreased. In contrast, the average age of US systems has continued to increase. The decline in US defense spending has been reversed, but strong and sustained

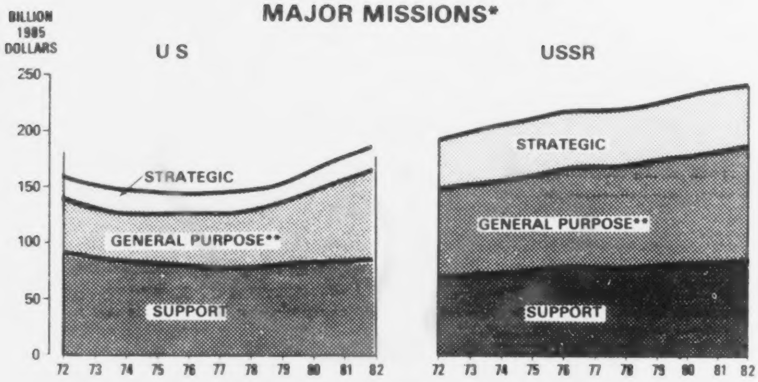
US AND SOVIET DEFENSE ACTIVITIES*



* A COMPARISON OF US OUTLAYS WITH ESTIMATED DOLLAR COSTS OF SOVIET ACTIVITIES INCLUDING INVESTMENT, OPERATING, AND RDT&E.

AS OF 1 JANUARY 1984 *CHART II-3*

MAJOR MISSIONS*



* U S OUTLAYS AND ESTIMATED DOLLAR COSTS OF SOVIET ACTIVITIES; DOES NOT INCLUDE RDT&E COSTS
** GPF DATA DOES NOT INCLUDE MOBILITY COSTS FOR THE STRATEGIC AND SUPPORT MISSIONS

AS OF 1 JANUARY 1984

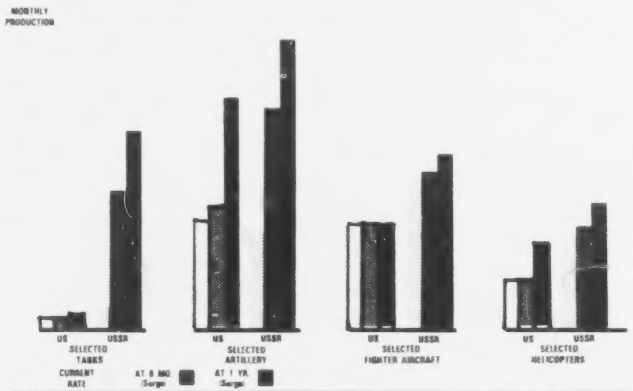
CHART II-4

US support for defense activities will be necessary in light of Soviet inventory expansion and their continuing high rate of investment.

Industrial Base

The military potential of nations can be measured, in part, by peacetime production bases and the capability for rapid conversion to wartime needs. The Soviet defense industry has consistently expanded over the past 20 to 25 years and is now the world's largest, both in numbers of facilities and physical size. Chart II-5 illustrates the ability of each nation to raise current production levels of selected weapon systems under surge conditions. The United States has a competitive surge capa-

US AND SOVIET MONTHLY PRODUCTION RATE OF SELECTED WEAPONS



AS OF 1 JANUARY 1984

CHART II-5

bility, except in tanks and fighter aircraft production. In computing the surge capabilities shown in Chart II-5, the industrial bases of both nations were not placed on a total war footing. If the full industrial potential of the United States were mobilized for military production, it should surpass that of the USSR in terms of physical size and output. Such a transition would require timely decisions. Initial surge production of some relatively simple items might occur within one month. Increased production of more complex munitions and weapon systems would not occur until much later.

Soviet weapons plants and war-related production facilities are continually active; as old weapon programs are phased out, new ones are begun. Downtime and layoffs are rare. As a result, the Soviet arms industry is in a high state of readiness and is capable of rapid wartime expansion. In contrast, the growing importance of high technology manufacturing and service industries, combined with the decline of heavy industry and traditional manufacturing required for arms production, have reduced the US capacity to increase military production rapidly during periods of crisis.

US defense planners recognize the need for an industrial base capable of supporting the materiel requirements of the US military strategy. Planners have established an Industrial Modernization Incentives Program which calls for efficient, competitive peacetime production, and the capability for accelerating inventory production and increasing preparedness for demands of wartime sustainability. Considerable investment will be required to insure that major improvements are made.

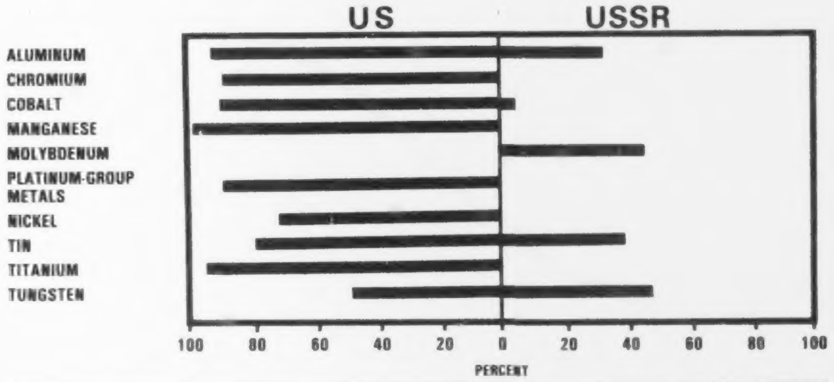
Natural Resources to Support Defense

Raw materials are another key element of the US and Soviet resource bases. The ability to mobilize and increase wartime production depends in part on the availability of critical raw materials. The Soviet Union, which has extensive and varied mineral resources and a long-term policy of self-sufficiency, relies on few imported strategic raw materials (Chart II-6). The United States, however, depends on foreign sources for most strategic minerals. US industry and government must anticipate problems in maintaining critical raw materials for military production in wartime.

Manpower in Support of Defense

Both the United States and the Soviet Union depend on large labor pools to man the armed forces and provide skilled labor to support their production bases. Chart II-7 shows that the Soviet armed forces are about two and one-half times larger than those of the United States. However, the Soviets hold only a 13 percent edge when the primary mobilization pools of the two nations are compared — males 15 to 49 years of age. Ap-

US/USSR RELIANCE ON SELECTED MINERAL REPORTS



AS OF 1 JANUARY 1984

CHART II-6

proximately the same number of males reach age 17 in both countries each year — about two million in 1983 — but the population of ethnic Russians, the Soviets' preferred source of military manpower, is declining.

The primary source of manpower for the Soviet armed forces is conscription. All able-bodied males reaching age 18, unless deferred, must enlist for two to three years of active military service or be drafted. The Soviet method yields lower personnel costs and a larger trained mobilization pool than the US system of voluntary service.

The work force in the Soviet production base is older than that of the United States and has shortages in skilled and semiskilled workers. In comparison, the United States has a large pool of skilled workers from which manpower is available for retraining in areas required by industries engaged in defense production.

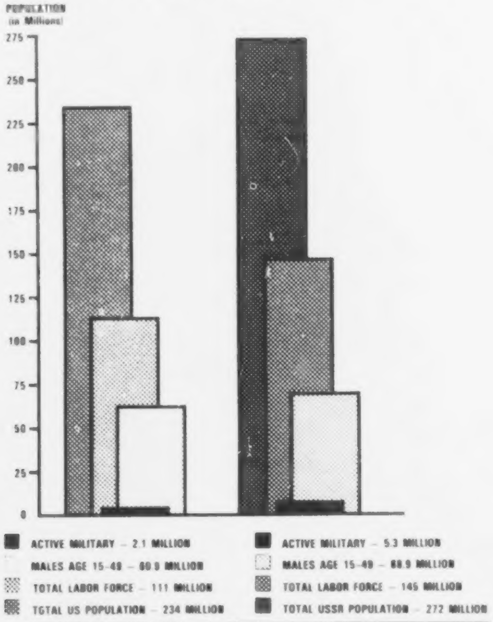
On balance, the Soviet manpower advantages lie in the numbers of personnel already under arms or involved in defense production, and the trained military mobilization pool. The size of the US labor pool should be sufficient to meet the demands of both the armed forces and military production because of the advantage of a less labor-intensive production base. The ability of the United States to meet both demands will depend, in part, on the availability of adequate response time.

OVERCOMING A QUANTITATIVE DISADVANTAGE

Technological Leadership

The Soviets' greater degree of peacetime mobilization is reflected by higher defense expenditures, a larger defense production base, and larger armed forces. The Soviet approach to defense has led to forces with a quantitative advantage over those of the United States.

US/USSR LABOR FORCE



AS OF 1 JANUARY 1984

CHART II-7

One US approach to countering numerically superior enemy forces has been to field qualitatively superior ones. This approach requires the United States and its allies to maintain the lead in technologies critical to military operations. Technological progress increases the deterrent value of US forces and provides a hedge against a Soviet technological breakout. US advanced technology also imposes strategic costs on the Soviets by causing them to divert resources from more threatening systems in order to counter new, more capable US systems. The importance of technology has never been more obvious than it is today. Yet, as Chart II-8 indicates, the US lead in several key technologies is slipping. Strong US and allied technology bases must be maintained if the qualitative lead in fielded systems is to be retained.

The United States and its allies must capitalize on advantages provided by superior weapon systems. US and allied technological leadership is even more critical now because the Soviets have fielded new equipment comparable in quality to that produced in the West. Although the US is ahead of the USSR in the important basic technologies, much of this advantage is lost when deployed systems are viewed from a technology perspective (Chart II-9). Since there are limits to the forces that the United States and its allies can build and operate, US and allied planners must search for ways to increase the effectiveness of the forces they do field

COMPARISON OF KEY MILITARY TECHNOLOGIES

BASIC TECHNOLOGIES	US SUPERIOR	US-USSR EQUAL	USSR SUPERIOR
Aerodynamics/Fluid Dynamics		X	
Automated Control		X	
Chemical Warfare			X
Computer	X		
Conventional Warhead (including Chemical Explosives)		X	
Directed Energy (Lasers)		X	
Electronic Warfare	X		
Electro-Optical Sensor (including IR)	X ➡		
Guidance & Navigation	X ➡		
Microelectronic Materials & Integrated Circuit Manufacture	X ➡		
Nuclear Warhead		X	
Ocean Science		X	
Optics	X ➡		
Power Sources (Mobile)		X	
Production Manufacturing	X		
Propulsion (Aerospace)	X		
Radar Sensor	X ➡		
Signal Processing	X		
Software	X		
Space	X		
Stealth (Signature Reduction Technology)	X		
Structural Materials (Light weight, high strength)	X ➡		
Submarine Detection	X ➡		
Telecommunications	X		

➡ indicates US lead is diminishing

AS OF 1 JANUARY 1984

CHART II-8

through the exploitation of emerging technologies, sound operational concepts, and effective training.

Emphasis must be given to technologies that provide the greatest increase in advantages and capabilities while insuring the readiness of current forces. High technology cannot provide the solution to all military requirements. In some cases, US and allied forces might more effectively combine less sophisticated platforms with modern munitions. In addition, technically superior equipment can only complement, not replace, superior planning, sound doctrine, and sustained support. Every proposed application of new technology must strike a balance among technical sophistication, essential readiness, cost, and the endurance of our forces. Precision-guided weapons, battle management and information systems, and target acquisition technologies offer promising opportunities for improving the effectiveness of conventional forces. Technologies should also be pursued that promise new capabilities.

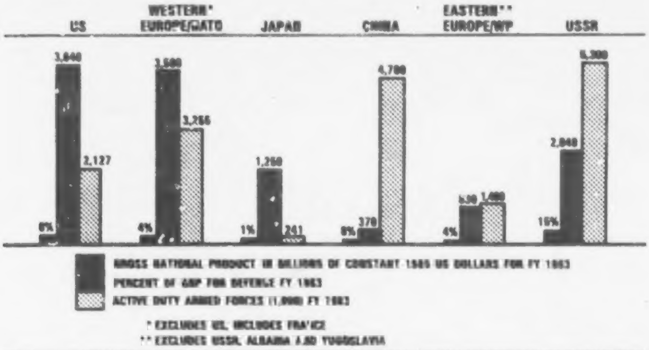
COMPARISON OF TECHNOLOGY LEVELS, DEPLOYED SYSTEMS

DEPLOYED SYSTEMS	US SUPERIOR	US–USSR EQUAL	USSR SUPERIOR
Strategic Nuclear			
ASAT			X
BMD			X
Bomber	X		
Cruise Missile	X		
ICBM		X ➡	
SSBN	X		
SLBM	X ➡		
SAMs			X
Conventional and Non-Strategic Nuclear			
Air-to-Air Missiles	X		
Air Lift	X		
Amphibious Warfare	X ➡		
Anti-Submarine Warfare	X ➡		
Anti-Tank Guided Munitions		X	
Artillery		X	
Attack Helicopters		X	
Ballistic Missiles		X	
Chemical Warfare			X
Fighter/Attack Aircraft	X ➡		
Infantry Combat Vehicles		X	
Naval Mine Warfare		X	
Naval Surface Combatants	X ➡		
Precision Guided Munitions	X ➡		
SAMs		X	
SSNs	X ➡		
Tanks		X	
Command, Control, and Communications			
Communications	X ➡		
ECM/ECCM	X		
Early Warning (includes Surveillance and Reconnaissance)	X		

➡ indicates US lead is diminishing

AS OF 1 JANUARY 1984 **CHART II-9**

ECONOMIC AND MILITARY STRENGTH OF MAJOR POWERS



AS OF 1 JANUARY 1984 *CHART II-10*

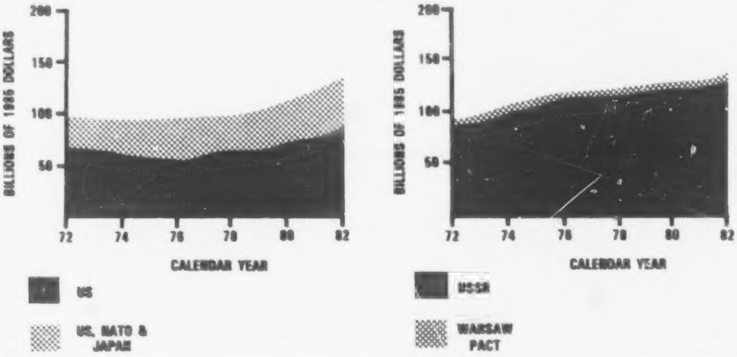
The maintenance of a US technological advantage also depends upon efforts to prevent the transfer of critical technology from the United States and other advanced nations to the Soviets and other potential adversaries. The transfer of critical technology reduces the cost to potential adversaries of acquiring new capabilities, allows them to deploy new systems sooner, and provides data that can be used to counter the effectiveness of US weapon systems and equipment.

Allied Forces

As noted in Chapter I, US military strategy is based on a strong system of alliances. The relative economic and military strengths of the major nations and blocs are indicated in Chart II-10. This chart shows the impressive advantage of the democratic powers' economic potential compared to that of the communist states. The US allies add substantially to the overall defense effort, both in terms of defense activities and investment (Chart II-11).

US and allied defense efforts must be integrated effectively to insure that their collective capabilities are realized. Efforts continue to achieve greater interoperability between US and allied equipment and techniques. Major achievements are within reach in the

COMPARATIVE DOLLAR COSTS OF MILITARY INVESTMENT



AS OF 1 JANUARY 1984 *CHART II-11*

logistics field. A coordinating committee is now addressing the interchangeability of 155mm howitzer ammunition within NATO and will subsequently work on other types of ammunition. By the end of 1984, all NATO fixed-wing aircraft will be able to use a common jet fuel. Under the NATO Mutual Support Act, the United States and its NATO allies can exchange logistics support, supplies, and services. Interoperability with friendly and allied Asian countries is also improving through technology transfers and more combined military exercises.

CHAPTER III. THE MILITARY BALANCE: NUCLEAR FORCES

INTRODUCTION

The global balance in nuclear and conventional forces is critical to US and allied security. Adverse trends in either of these categories lessen assurance that aggression against US and allied interests can be deterred, or defeated if necessary, and increase the risks of coercion and intimidation. Although significant progress has been made toward redressing trends unfavorable to the West, this progress has not compensated fully for decades of high Soviet investment in force expansion and modernization.

The assessment of the military balance is a complex process, involving quantitative analyses as well as judgments concerning such intangible and unquantifiable factors as leadership, training, and morale. Static force measurements provide useful comparisons of capabilities but do not reflect adequately the interaction of forces in war. Whenever possible, static force comparisons should be complemented by dynamic analyses that attempt to incorporate some of the operational complexities.

This chapter compares the strategic and nonstrategic nuclear forces of the United States with those of the Soviet Union. Chapter IV assesses conventional forces.

STRATEGIC NUCLEAR FORCES

The strategic nuclear forces of the United States are currently capable of fulfilling their most important mission — that of deterring attack against the United States and its allies. The combination of land-based ICBMs, submarine-launched ballistic missiles (SLBMs), and long-range bombers continues to provide a balanced range of capabilities. This TRIAD of offensive forces is the element most commonly associated with US strategic nuclear forces. There are two other major elements of the US nuclear deterrent: the command and control systems, which provide connectivity and positive control among the strategic forces and the National Command Authorities (NCA); and strategic defensive forces. Effective command and control systems are essential to the positive control maintained by the NCA and commanders over the employment of their forces. Strategic defensive forces contribute to deterrence by reducing the potential effectiveness of attack and increasing any attacker's uncertainty of success.

Strategic Offensive Forces

The power and variety of the US TRIAD of offensive forces would complicate any Soviet first strike planning and give the United States the resiliency and flexibility for a measured response to any type of attack. The need to maintain such potential is clear.

Soviet strategic thinking holds that, with superior capabilities, they can fight and win a nuclear war with the United States. The sustained Soviet strategic buildup during the past two decades seems to bear this out. Chart III-1 shows that the Soviets hold a distinct advantage in terms of total numbers of strategic offensive forces. The Soviets have improved all aspects of their strategic offensive forces and supporting elements, significantly modernized their command and control capabilities, and upgraded their strategic defenses. The Soviets are convinced that potential enemies will not only be deterred from initiating attacks on the Soviet Union because of their superior nuclear forces, but also will be hesitant to counter Soviet political or military actions in general.

STRATEGIC OFFENSIVE FORCES

ICBMs

US		USSR	
40	TITAN	SS-11	550
450	MINUTEMAN II	SS-13	60
550	MINUTEMAN III	SS-17	150
1040		SS-18	308
		SS-19	330
			1398

SLBMs

US		USSR	
304	POSEIDON	SS-N-5	45
288	TRIDENT I*	SS-N-6	368
592		SS-N-8	292
		SS-N-17	12
		SS-N-18	224
		SS-N-20*	40
			981

BOMBERS

US		USSR	
168	B-52G	BEAR	100
96	B-52H	BISON	45
61	FB-111	BACKFIRE**	230
325			375

APPROXIMATE TOTALS

	US	USSR
DELIVERY VEHICLES		
• MISSILES	1632	2379
• BOMBERS	325	375

* INCLUDES SLBMs POTENTIALLY CARRIED ON TRIDENT AND TYPHOON SSBNs ON SEA TRIAL

** INCLUDES SOVIET STRATEGIC AIR FORCE AND NAVAL AVIATION BACKFIRE AIRCRAFT

AS OF 1 JANUARY 1984

CHART III-1

US strategic force modernization efforts have not kept pace with the improvement in Soviet capabilities (Chart III-2). US strategic forces have been supported largely by investments made from the 1960s to the early 1970s. The long-delayed modernization program, which has been designed to rectify this situation, will require a sustained commitment.

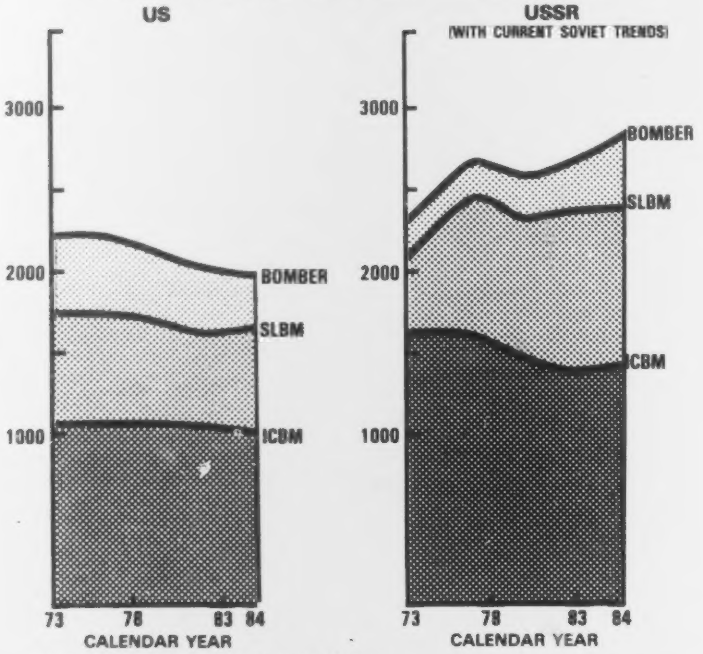
The negotiation of meaningful, verifiable arms control agreements is an equally important element of the strategic forces equation because such agreements could reduce the threat and contribute to stability. The United States seeks a significant reduction in warheads, missile launchers, and throw-weight and a limitation on the number of strategic bombers and air-launched cruise missiles, on the basis of negotiated agreements with the Soviet Union. US efforts aim at preserving a stable relationship with the Soviet Union by remedying strategic force imbalances through force restructuring and modernization, complemented by negotiated arms reductions.

Strategic Offensive Force Potential

The ten-year trends in strategic nuclear force capabilities displayed in Chart III-3 indicate a steady shift toward a Soviet advantage. The relative strategic force capabilities are depicted in this chart of static measures. These

STRATEGIC FORCES*

STRATEGIC NUCLEAR DELIVERY VEHICLES (SNDV)

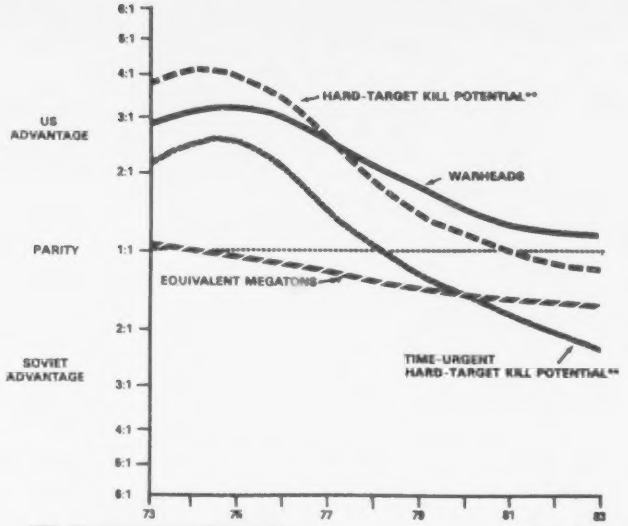


* TOTAL ACTIVE INVENTORY (INCLUDES FB-111 AND BACKFIRE)

AS OF 1 JANUARY 1984 *CHART III-2*

STRATEGIC FORCES*

PREATTACK STATIC RATIO COMPARISON



* TOTAL ACTIVE INVENTORY EXCLUDES FB-111 AND BACKFIRE
** CALCULATIONS ARE BASED ON POTENTIAL AGAINST IDENTICAL HARDNESS TARGETS

AS OF 1 JANUARY 1984

CHART III-3

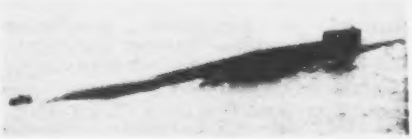
measures represent summations of force attributes. Although static measures do not reflect military force adequacy for specific missions, they are useful tools in describing relative force trends.

The Soviets took the lead in equivalent megatons (soft-target capability) in the mid-1970s and have increased their capability considerably since then. The United States reduced its total equivalent megatonnage during the past decade.

The trend toward a Soviet advantage can be attributed to a number of factors. The Soviet deployment of fourth-generation ICBMs and the modernization of their submarine force dramatically multiplied their inventory of high-quality strategic warheads. Chart III-4 shows the US and Soviet strategic force deployments of the last decade. The Soviets have increased their strategic warheads more than three-fold since 1973. During the same period, the number of US strategic warheads increased at a much lower rate, as the US inventory shifted to a slightly higher number of warheads, but of lower average yield.

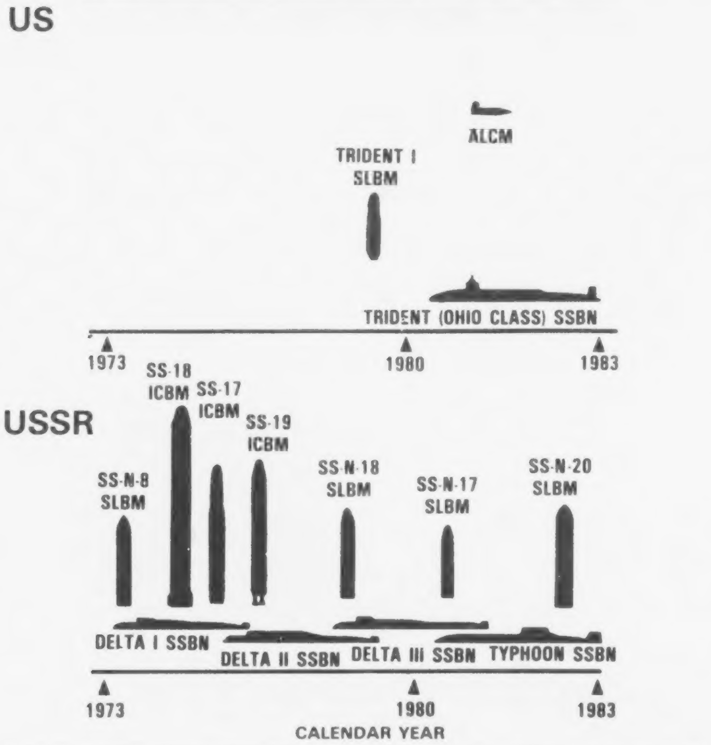
Land-based ICBM forces constitute the preponderance of Soviet nuclear capability. There has been a significant increase in the number and quality of the Soviet nuclear warhead inventory since 1973. Today, the most accurate versions of the SS-18 and SS-19 missiles are capable of destroying time-urgent and hardened targets in an initial attack. This capability places at risk such targets as US strategic command and control nodes and MINUTEMAN ICBMs. Since these Soviet missiles carry multiple warheads, a significant number of these weapons could remain in reserve after executing an initial attack on US ICBMs.

The Soviets are also expanding and modernizing their SLBM force. Since 1973, they have deployed the DELTA-I, DELTA-II, and DELTA-III classes of nuclear-powered ballistic missile submarines (SSBNs). In parallel with their deployment of the DELTA-class SSBNs, the Soviets have deployed the more capable SS-N-8



DELTA-III SSBN

MAJOR STRATEGIC SYSTEM DEPLOYMENTS

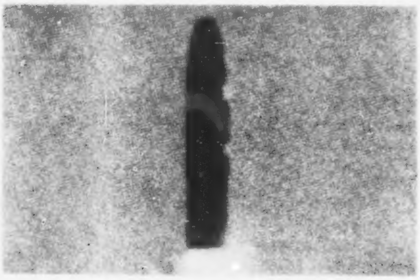


AS OF 1 JANUARY 1984

CHART III-4

and SS-N-18 SLBMs. They have deployed the SS-N-17 SLBM aboard one modified YANKEE SSBN. In addition, they have launched two TYPHOON-class SSBNs, one of which is now operational. The TYPHOON-class submarines have 20 launchers for SS-N-20 missiles. These missiles are armed with six to nine warheads and have a booster range of 8,300 kilometers. All of these systems except the SS-N-17 are capable of striking targets throughout most of the United States from Soviet home waters.

The major US improvement to the ICBM force since 1973 has been the fielding of an improved warhead for a portion of the MINUTEMAN III force. US SLBM capabilities were improved by equipping the entire force with multiple-warhead missiles. In addition, between 1979 and 1983, 12 POSEIDON submarines were retrofitted with the TRIDENT I (C-4) missile. This longer-range SLBM allows expanded patrol areas, shorter travel distance to patrol stations, and the capability to launch against many Soviet targets from US home waters. The OHIO-class submarines, introduced into the SSBN fleet in 1982, are also fitted with C-4 missiles. Although the United States has not fielded a new strategic bomber since 1962, improvements have been made to this component of the TRIAD. The first squadron of B-52G bombers modified to carry the new ALCM became operational in December 1982. Sixty B-52Gs are now outfitted with ALCMs, improving their penetration capability against increasingly dense and sophisticated Soviet air defenses.



TRIDENT I MISSILE

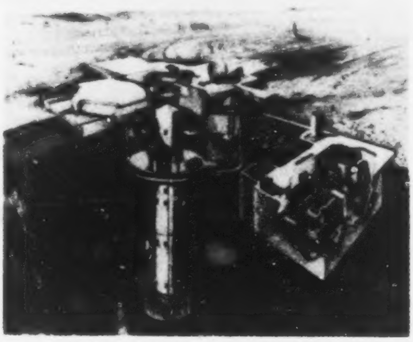
B-52 LAUNCHING ALCM

As the Soviets expanded their strategic nuclear forces, hardening techniques were used to protect command and control links, ICBM forces, and SSBN facilities. The current Soviet ICBM force is far more survivable now than a decade ago.

Strategic Offensive Force Modernization

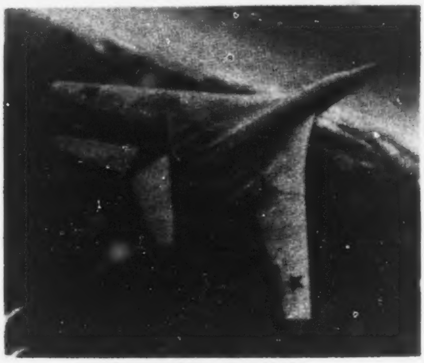
In October 1981, the United States embarked on a program of strategic force modernization intended to redress adverse strategic force trends. Offensive force modernization included deployment of 100 PEACEKEEPER missiles, with initial deployment in 1986; the production of at least one TRIDENT SSBN per year and the development of an advanced TRIDENT II SLBM, with initial deployment set for 1989; development of a variant of the B-1 bomber, to become operational in 1986; and development of an Advanced Technology Bomber, programmed to supplement the B-1B in the early 1990s.

In April 1983, the modernization program was modified to deploy 100 PEACEKEEPER missiles in existing MINUTEMAN silos and initiate engineering development of a small, single-warhead ICBM, aiming for initial deployment in the early 1990s. These modifications reinforce the US approach to arms control, which seeks significant reductions in strategic weapons. The early deployment of PEACEKEEPER and a small, single-warhead ICBM reflect the US commitment to establish a



PEACEKEEPER MISSILE DEPLOYED IN MINUTEMAN SILO stable nuclear balance and stimulate the Soviets to adopt a serious approach toward arms control. The modernization program is being aggressively pursued but will require continued support.

The Soviets currently have more than 30 new strategic offensive systems in various stages of development. Projections for the 1983-1993 period include new, solid-propellant medium and small ICBMs, both silo based and mobile, and improvements in the currently-deployed SS-18 and SS-19 ICBMs. Follow-on systems with greater accuracy and targeting flexibility are being developed. SLBM projections include deployment of the SS-N-20 (TYPHOON-class) SLBM and development of the SS-NX-23, follow-on missile to the SS-N-18. The airbreathing threat is likely to grow significantly. Continued BACKFIRE production accounts for the great increase in the number of delivery vehicles. Projected deployment of the new BLACKJACK A and BEAR H intercontinental bombers will also increase the airbreathing threat. Both of these bombers eventually will carry long-range cruise missiles. The airbreathing threat projection also includes development of land and submarine-launched cruise missiles with ranges greater than 2,000 nautical miles.



BLACKJACK A BOMBER

Chart III-5 compares US and Soviet strategic offensive force capabilities for the period 1973-1993 in the absence of arms control constraints. The US force consists of weapon systems programmed through 1989, plus those systems contained in the strategic modernization program to be deployed after 1989. The Soviet force represents a continuation of current Soviet trends.

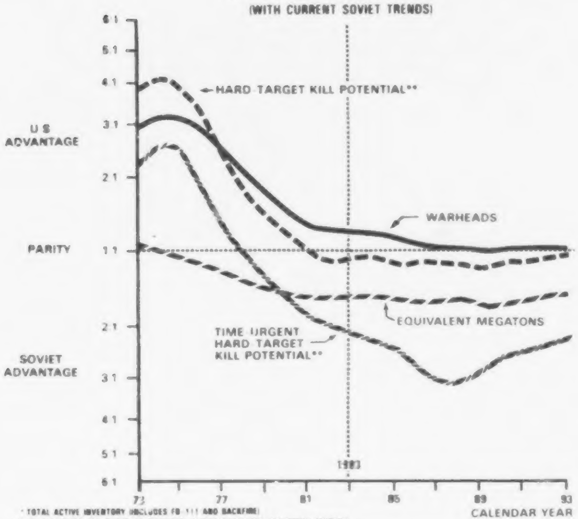
Chart III-5 shows that trends favoring the Soviet Union will be arrested by the mid-1980s, with movement toward parity occurring in the late 1980s. The US advantage in total warheads will continue to decline until 1986, level out, and then begin a modest increase in the late 1980s. The projected quantitative and qualitative growth in Soviet offensive weapons should be offset by the planned and programmed US modernization efforts. Against time-urgent hard targets, the increased effectiveness of the PEACEKEEPER ICBM and TRIDENT II SLBM will act as a counterbalance to the Soviet hard-target kill potential (HTKP) capability represented by their SS-18 and SS-19 forces. Thus, the trend leading toward a three-to-one Soviet time-urgent HTKP in 1987 is projected to reverse toward parity thereafter. Even though the United States lost its HTKP advantage in 1981, continued deployments of ALCMs will move the HTKP back toward parity. As the Soviets make qualitative improvements in their SS-18 and SS-19 ICBMs, and replace older SS-11, SS-13, and SS-17 missiles with greater numbers of a new generation of ICBMs like the SS-X-24 and SS-X-25, the corresponding US deployment of PEACEKEEPER, TRIDENT, B-1B, and ATB should offset Soviet counterforce capabilities. Overall, the HTKP will be relatively stable and near parity during the period shown. It should be noted, however, that the calculation of HTKP did not consider that Soviet ICBM silos are significantly harder than those of the United States or that Soviet air defenses are more extensive. In the late 1980s, US deployments of the above systems should also reverse the trend in equivalent megatons. Even so, the Soviets will retain an equivalent megatonnage advantage at least through 1993.

The validity of the projections in Chart III-5 depends upon the extent and speed to which the United States modernizes its strategic forces and assumes that the Soviets will not deploy forces in excess of current trends. A higher Soviet strategic force estimate has been made that assumes a substantially greater Soviet commitment of resources to defense, but even this assessment does not represent an upper limit of their capabilities. Both force estimates are plausible. The differences between the higher estimate and that based on current trends reflect uncertainties about the technological choices and improvements the Soviets might make and their potential deployment levels for new systems. For example, the 308 SS-18s now in the Soviet inventory have more throw-weight potential than the combined force of all US ICBMs and SLBMs, as shown in Chart III-6. If the Soviets increase the number of warheads carried on each SS-18, the corresponding equi-

STRATEGIC FORCES*

PREATTACK STATIC RATIO COMPARISON

(WITH CURRENT SOVIET TRENDS)



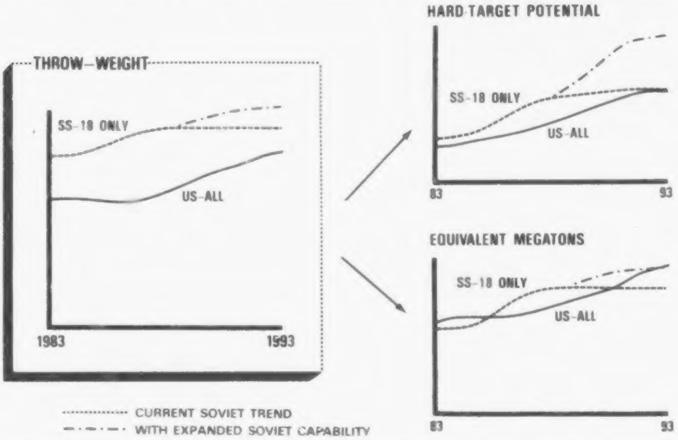
* TOTAL ACTIVE INVENTORY (INCLUDES FB-111 AND BACKFIRE)

** CALCULATIONS ARE BASED ON POTENTIAL AGAINST IDENTICAL HARDNESS TARGETS

AS OF 1 JANUARY 1984

CHART III-5

SS-18 vs ENTIRE US MISSILE FORCE (ICBM & SLBM)



AS OF 1 JANUARY 1984

CHART III-6

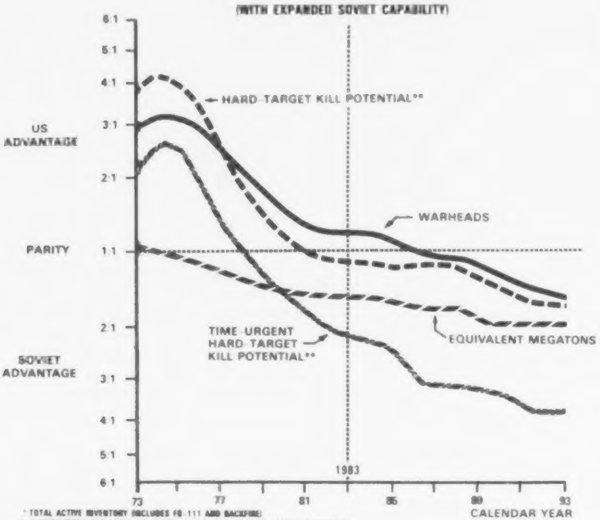
valent megatonnage and HTKP of the SS-18 could approach the capabilities possessed by the entire US ICBM and SLBM force.

Chart III-7 compares the same planned and programmed US force with a Soviet force that reflects US analyses of achievable Soviet production and development levels and, in some cases, more technically advanced systems. In this comparison, all static force trends toward Soviet advantage continue beyond the 1980s. The deployment of modernized US systems does not halt the downward slide until the early 1990s. Only when the TRIDENT II SLBM, small ICBM, and the ATB are deployed is there a trend reversal of any measure of capability.

STRATEGIC FORCES*

PREATTACK STATIC RATIO COMPARISON

(WITH EXPANDED SOVIET CAPABILITY)



* TOTAL ACTIVE INVENTORY INCLUDES FB-111 AND BACKFIRE

** CALCULATIONS ARE BASED ON POTENTIAL AGAINST IDENTICAL HARDNESS TARGETS

AS OF 1 JANUARY 1984

CHART III-7

Strategic Offensive Force Effectiveness

Preattack static measures only highlight relative offensive capabilities. The Soviets have significantly improved their warfighting capabilities by modernizing their support systems and strategic defensive forces, as well as their offensive forces. The Soviets also have improved their counterforce capability, developed a potential reload and refire capability for part of their ICBM force, and widely deployed strategic offensive systems. The Soviets have sought to limit damage by hardening ICBM silos to levels well above that of the hardest US silos. They also have deployed an antiballistic missile capability around Moscow, prepared bunkers for their key leadership and civilian work force, and planned for dispersal of conventional forces and urban populations. Static measures reflect none of these factors. Static measures also neglect other differences in force quality and employment strategy. These additional aspects are best captured in a dynamic comparison of strategic force effectiveness.

A dynamic analysis of US and Soviet force capabilities was performed for 1983 and 1993. The analysis reflected the different target objectives and characteristics for each side. The Soviet target base is significantly less vulnerable to nuclear effects than that of the United States. The analysis assumed that the Anti-Ballistic Missile (ABM) Treaty remained in effect and the opposing sides employed only nuclear weapons in homeland-to-homeland exchanges. Additionally, all forces on both sides were assumed to have received and executed a launch order.

Neither US nor Soviet forces can fully achieve their military objectives today should deterrence fail. The current US force effectiveness has notable deficiencies, but improves significantly through 1993. Soviet strategic forces are more effective than those of the United States because of asymmetries in role and doctrine and the development by the Soviets of protected and dispersed sites for essential installations, forces, and personnel. Nevertheless, the improved US posture will strengthen deterrence because US forces would remain effective even if the Soviets were to attack.

Command and Control

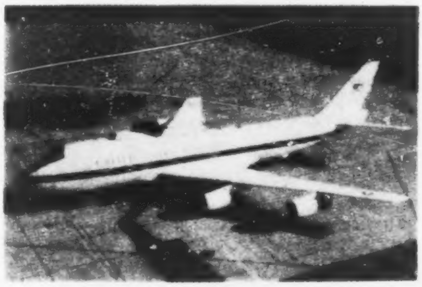
US Command and Control

Connectivity between the NCA and strategic nuclear forces is of concern in the modernization program. The credibility of the US strategic deterrent depends on command and control systems that provide for positive control and effective employment of all three legs of the TRIAD. Potential adversaries must be convinced that US command and control systems have the flexibility and endurance to assure connectivity before, during, and after an attack.

Before and during the early stages of an attack, command and control systems must function with speed, reliability, and accuracy to warn the NCA and strategic forces that an attack has been initiated. These systems must also define the nature of the attack to allow appropriate defensive and damage-limiting actions and to permit the NCA to direct the appropriate response. Tactical warning and attack assessment sensors and communications are used to detect and forward attack information to command authorities. New systems, such as laser communications data links systems, secure voice conferencing, and extremely high frequency communications satellites, will be fielded. These improvements will reduce communications uncertainties during attack and provide the NCA more effective warning and assessment for force management.

The national command and control structure provides the means for the NCA, JCS, and commanders of the unified and specified commands to receive information to support their decisionmaking and enables them to direct forces in crises and during nuclear war. The National Military Command System (NMCS) is the command and control system through which the NCA direct employment of US military forces. The Minimum Essential Emergency Communications Network (MEECN) would deliver the initial time-urgent commands in the first stages of a nuclear war. Airborne resources provide the backbone of the MEECN, but some of its elements are vulnerable to disruption by high-altitude nuclear bursts. Improvements in the survivability of these airborne systems and development of the Groundwave Emergency Network and a new communications satellite system, MILSTAR, are required. Airborne command post command and control systems need to be modified to protect against high-altitude nuclear detonation effects, and an aircraft more capable of communicating with the SSBN fleet should be deployed. An extremely low frequency communications system is being implemented to improve command and control of the submarine fleet and avoid limitations associated with operations near the surface.

The United States requires enduring command and control systems because the Soviets could plan repeated nuclear strikes. Survival of the NCA and an element of the NMCS must be guaranteed during and after a nuclear attack. The National Emergency Airborne Command Post (NEACP) is the most survivable element of the NMCS. The addition of automatic data processing, expanded use of satellite communications, a continuous secure voice conferencing capability, and conversion of the NEACP fleet to the E-4B aircraft, will increase the ability of this system to support the NCA. The NEACP can be launched and survive a surprise attack. With the E-4B, NEACP has gained capabilities for enduring force management. The United States, however, should continue to develop a ground-mobile command center concept to insure that force management functions can be sustained.



E-4B NEACP

The US capability to conduct post-impact assessments on the basis of nuclear detonation detection and reporting is limited. Deployment of the Nuclear Detection System on Global Positioning System satellites will improve assessment capabilities significantly.

Soviet Command and Control

The Soviet Defense Committee, through the General Staff, exercises highly centralized control over its military commands. The Soviets have developed extensive and modern command, control, and communication systems to assist in this effort. These systems emphasize survivability, redundancy, and flexibility and provide internetting of all communications from the Soviet high command down to, if not below, division level.

The Soviet high command expects to be able to communicate with its forces during a strategic nuclear exchange and to direct all operations. Toward this end, the Soviets have constructed hardened underground bunkers for the primary military authorities. These facilities are equipped with multiple means of communication. In addition, the Soviets have developed air and ground-mobile systems that can serve as alternate command posts, providing a hedge against destruction of primary sites.

Strategic Defensive Forces

Strategic defense includes missile, air, and space defense, and such measures as systems hardening and civil defense. US strategic defensive systems reduce the potential effectiveness of Soviet nuclear attacks, adding uncertainty to the possible outcomes of nuclear conflict and undermining an attacker's confidence in success. The United States has relied upon survivable offensive systems to deter Soviet attack rather than upon strategic defenses. Current US strategic defenses include air defense forces and ground and space-based surveillance systems. The Soviet Union, on the other hand, has pursued a full range of strategic defensive programs to protect the key civilian and military leadership, preserve vital functions of government, and limit damage from retaliation. The Soviets have rejected mutual vulnerability as a continued basis for the strategic balance.

The United States is reexamining strategic defense in order to assure an adequate retaliatory capability and take a positive step toward more stable deterrence. In the past, US strategic deterrence relied upon an assured retaliation. Both the Soviet and US strategic forces were relatively secure from a disarming attack. The improved effectiveness of the ICBMs of both sides and the continued Soviet strategic buildup have led to a less stable environment. Defensive systems may become more important in strengthening the US strategic force posture. In this environment, effective US defense, particularly against ballistic missiles, can reduce the effectiveness of Soviet preemptive attacks.

Missile Defense

High costs for uncertain results prompted the United States to abandon its missile defenses in the 1970s. Although the ABM Treaty allows limited defense of one site, only the Soviet Union deploys such a system (Chart III-8). As part of a new initiative to reduce the threat of ballistic missiles, the United States is developing the technologies necessary to provide a comprehensive defense against ballistic missiles in all phases of their trajectories. This research program is in full accord with the ABM Treaty.

US defense systems depend upon effective tactical warning and attack assessment to detect, identify, and track enemy weapon systems before and during an attack. Reliable and positive surveillance systems must provide unambiguous warning of attacking missiles. The US ground and space-based systems are designed to provide unambiguous warning and to confirm the launch of attacking missiles.

The current space-based surveillance system relies on infrared sensors aboard satellites. These satellites detect SLBM and ICBM launches. System survivability is being upgraded. More durable follow-on satellites will replace current satellites during the 1980s.

The current ground-based radars, PAVE PAWS, Perimeter Acquisition Radar Attack Characterization System (PARCS), Ballistic Missile Early Warning System (BMEWS), and COBRA DANE, confirm satellite warning of ICBM attacks from the north and SLBM attacks from normal Soviet submarine operating areas. The future activation of two southern PAVE PAWS sites in the late 1980s will complete the radar coverage of likely SLBM approach routes.

Other systems contribute unique capabilities to monitor against military surprise. Strategic airborne reconnaissance systems such as the U-2R, the SR-71, and the RC-135 aircraft carry a variety of sensors to detect ground and air activities. For ocean surveillance, P-3 aircraft, augmented by towed-array sonar systems, are key to tracking submarines.

DEFENSE AGAINST BALLISTIC MISSILES

US	*USSR*

ABM DEFENSE
• NONE SINCE SAFEGUARD PHASED OUT IN 1976
• R&D ONLY - HEDGE AGAINST SOVIET BREAKOUT
• ICBM TERMINAL DEFENSE COULD BE DEPLOYED IN THE EARLY 1990s
• DEFENSE INITIATIVE, 23 MAR 83: LONG-TERM R&D
	ABM DEFENSE
	• SINGLE SITE AT MOSCOW WITHIN ABM TREATY
	  • LIMITED CAPABILITY
	  • UPGRADE PROJECTED
	• ENDO- AND EXO-ATMOSPHERIC INTERCEPTORS
	• TARGET ACQUISITION, TRACKING, AND HAND OFF RADARS
	• SYSTEMS AVAILABLE FOR RAPID, WIDESPREAD DEPLOYMENT BEYOND ABM TREATY

DIRECTED ENERGY WEAPONS • CANDIDATE TECHNOLOGY FOR DEVELOPMENT IN 23 MAR 83 DEFENSE INITIATIVE	DIRECTED ENERGY WEAPONS • VIGOROUS R&D WITH POSSIBLE ABM APPLICATIONS IN 1990s
TACTICAL WARNING AND ATTACK ASSESSMENT • 3 LONG-RANGE DETECTION AND TRACKING RADARS (BMEWS) • PHASED-ARRAY WARNING SYSTEM (PAVE PAWS) • PERIMETER ACQUISITION RADAR ATTACK CHARACTERIZATION SYSTEM	TACTICAL WARNING AND ATTACK ASSESSMENT • OVER-THE-HORIZON RADARS • PHASED-ARRAY RADARS • LAUNCH DETECTION SATELLITES

AS OF 1 JANUARY 1984 *CHART III-8*

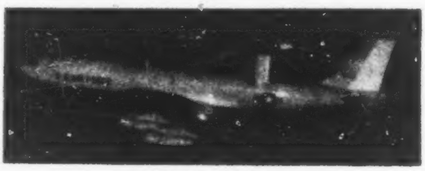
PAVE PAWS RADAR

Soviet planning has stressed the need to limit damage to key leadership and control centers. The Soviets continue to modernize their ABM system around Moscow and have a strong development program which will enable rapid, widespread ABM deployment. In addition, their vigorous directed-energy weapons research and development efforts could lead to a ground-based ABM capability in the 1990s. To complement their ABM efforts, the Soviets have developed an extensive tactical warning and attack assessment capability, based on launch detection satellites and over-the-horizon and phased-array radars.

Air Defense

The United States and Canada share continental air defense responsibilities under the provisions of the North American Air Defense Treaty. Both nations assign forces to the North American Aerospace Defense Command (NORAD).

Current US air defenses are composed of tactical warning and attack assessment (TW/AA) sensors, search and track radars, Airborne Warning and Control System (AWACS) aircraft, and interceptor aircraft. The last surface-to-air missiles (SAM) deployed for continental United States (CONUS) air defense were phased out

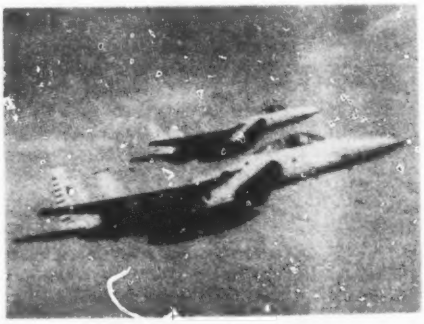


E-3A AWACS

in 1975. Soviet development of long-range cruise missiles and modern bombers has increased the concern that they would be tempted to exploit existing gaps in US radar coverage. These gaps are being corrected, in part, by deployment of improved microwave radars and over-the-horizon backscatter (OTH-B) radars, which provide surveillance of attack routes as far out as 1,800 miles. AWACS patrols will provide interim coverage until the present Distant Early Warning (DEW) Line radars are replaced by the North Warning System and OTH-B radars. The improved DEW Line across Alaska, northern Canada, and Greenland searching north and OTH-B radars searching east, west, and south will provide a surveillance capability for tactical warning at ranges that will allow increased response time against aircraft and cruise missiles. Peacetime surveillance of continental airspace is being strengthened by integration of selected civilian and military radar sites under the control of the Region Operations Control Centers that comprise the Joint Surveillance System. This system, which became operational in 1983, provides regional air defense command and control during the initial stages of an attack.

Improvements in the TW/AA sensors and search and track radar system have been accompanied by interceptor aircraft improvements. The 153 US F-106 and 90 F-4 aircraft are now being replaced by more capable F-15 and F-16 aircraft. The Canadians have assigned to NORAD 28 CF-101 interceptor aircraft. These aircraft are scheduled to be replaced with 24 CF-18 aircraft by 1985.

The Soviets emphasize air defense and continue to upgrade their capabilities. The Soviets have 1,200 interceptors assigned to homeland defense and are developing a long-range intercept capability. The newly deployed FOXHOUND A is the first Soviet fighter-interceptor to have lockdown-shootdown and multiple target engagement capabilities. For point defense, the Soviets have deployed 9,600 SAM launchers. The Soviets continue to develop and deploy improved SAM systems. The new SA-10 is estimated to be effective against small, low-altitude targets. The SA-X-12 is a tactical SAM system that could be deployed in the mid-1980s. This new system will replace the SA-4 as the Army and front level air defense system and could also serve as a gap-filler for strategic defense. For surveillance of their air space, the Soviets have deployed early-warning aircraft and over 6,000 search and track radars at over 1,200 sites. They are currently testing an improved early-warning aircraft. The Soviet air defenses will continue to pose a major challenge to the US bomber force.



AIR DEFENSE F-15

MiG-25 FOXBAT INTERCEPTOR

Space Defense

The Soviet Union has the world's only operational antisatellite system (ASAT). The Soviets are also believed to be capable of attacking satellites in near-earth orbits with direct ascent ABM interceptors. Vigorous Soviet research and development efforts in ground-based and space-based directed-energy technology have potential ASAT applications.

The United States is continuing to develop antisatellite weapons to reduce the effectiveness of Soviet space systems and deter Soviet first use of antisatellite weapons. The initial US capability is expected to be provided by the Miniature Air-Launched System, a small missile launched from F-15 aircraft. The system is planned to be deployed with operational air-defense F-15 squadrons.

Research is being conducted on more advanced systems such as space-based lasers and other directed-energy weapons.

A broad program is being developed to insure that the services provided by space systems will be available for use by the combat forces when needed. The US military space effort continues to expand. A number of space systems are now operational and provide important support to operational commanders. The United States must be able to continue this essential space support at critical times during conflict.

Other Defense Measures

Both the United States and the Soviet Union have hardened elements of their strategic offensive systems to withstand the overpressure from a nuclear detonation, with first priority being given to missile silos and essential command and control systems. The results of hardening are evident in the characteristics of strategic targets in each nation. The Soviet Union has extensively improved its strategic capability by dispersing critical facilities, hardening structures, and developing mobile systems. For the most part, the United States has not extended hardening to economic or government facilities beyond those actually involved in strategic intelligence and command and control operations.

Civil defense receives far more emphasis and resources in the Soviet Union than in the United States. The Soviets view civil defense as an integral part of their strategic posture and invest heavily in the protection of their key leadership, essential work force, critical economic facilities, and general population. Soviet programs include construction of protective relocation facilities, organizational planning, training, and the commitment of manpower to the civil defense structure. US efforts, which combine disaster relief and nuclear attack preparedness, do not provide for adequate support of a dispersed population or protection of war-supporting industry and its labor force.

Strategic Defense Summary Assessment

Chart III-9 provides an assessment of the key features of US and USSR strategic force postures. The new defense initiative has the potential to limit the value to an aggressor of its ICBMs and SLBMs. If this potential is realized, the US concept of deterrence could shift toward the ability to defend against attack and away from total reliance on the ability to retaliate.

SUMMARY ASSESSMENT
STRATEGIC DEFENSE

US	USSR
BMD • DISMANTLED • 23 MAR 83 DEFENSE INITIATIVE	BMD • DEPLOYED AROUND MOSCOW—WITHIN TREATY • SYSTEMS AVAILABLE FOR POTENTIAL BREAKOUT
AIR DEFENSE • SAMs PHASED OUT IN 1975 • 300 INTERCEPTORS • 100 RADARS	AIR DEFENSE • 9600 SAMs • 1200 INTERCEPTORS • 6300 RADARS
SPACE DEFENSE • EARLY INTERCEPTOR DISMANTLED • F-15 LAUNCHED ASAT IN DEVELOPMENT	SPACE DEFENSE • ORBITAL ASAT OPERATIONAL • POTENTIAL USE OF ABM AS ASAT
CIVIL DEFENSE • LIMITED PROGRAM	CIVIL DEFENSE • STRONG PROGRAM
RELIANCE ON RETALIATORY CAPABILITY • EFFECTIVE TACTICAL WARNING AND ATTACK ASSESSMENT • SURVIVABLE TRIAD	RELIANCE ON DAMAGE LIMITATION AND OFFENSIVE CAPABILITY • EFFECTIVE TACTICAL WARNING AND ATTACK ASSESSMENT • ACTIVE DEFENSES • PASSIVE DEFENSES • SURVIVABLE SUPERIOR OFFENSIVE CAPABILITY

AS OF 1 JANUARY 1984

CHART III-9

NONSTRATEGIC NUCLEAR FORCES

The United States must possess a broad spectrum of nuclear force options to deter aggression and to defend its interests should deterrence fail. Strategic forces support many options, but other nuclear forces are also required. Nonstrategic nuclear forces (NSNF) consist of land-based systems for battlefield support and intermediate-range strikes, and sea-based systems for land strike and antisurface ship, air defense, and antisubmarine warfare.

NSNF support conventional forces by providing a major deterrent to conventional, theater nuclear, and chemical attack, and are essential to the agreed NATO strategy of flexible response. NSNF provide a range of employment options that creates uncertainty for potential aggressors concerning US and allied responses, forcing them to reassess their objectives. Such forces could deny the enemy sanctuary to mass forces behind the immediate battle zone and could break up the momentum of a massive offensive.

Although US NSNF are available for use worldwide, the majority of these forces are located in Europe. The primary NSNF threat to US and allied forces is also located in Europe, although SS-20 missiles based in eastern and central USSR and Soviet sea-based nuclear forces pose a growing threat in Asia. The following assessments of NSNF are provided in a NATO-Warsaw Pact context.

Intermediate-Range Nuclear Forces

Intermediate-range nuclear forces (INF) include land-based missiles and aircraft capable of striking targets beyond the general area of the battlefield, but not capable of intercontinental range.

Longer-Range Intermediate-Range Nuclear Forces

Longer-range intermediate-range nuclear force (LRINF) missiles have ranges between 1,800 km and 5,500 km. In December 1979, NATO decided to prepare for deployment of US PERSHING II ballistic missiles and ground-launched cruise missiles (GLCM) as part of an agreed dual-track approach for responding to the Soviet deployment of the SS-20 missile. The SS-20 was a significantly greater threat than previously deployed SS-4s and SS-5s. In 1981, the United States entered into negotiations with the Soviet Union to reduce the number of LRINF missiles, the second track of the approach. To date, negotiations have not produced an agreement. Therefore, in late 1983, NATO began deploying PERSHING II and GLCM missiles. Deployments are scheduled to continue through 1988 at which time there will be 108 PERSHING IIs and 464 GLCMs on launchers in Europe unless negotiations reduce NATO and Soviet LRINF missiles to lower levels.

PERSHING II

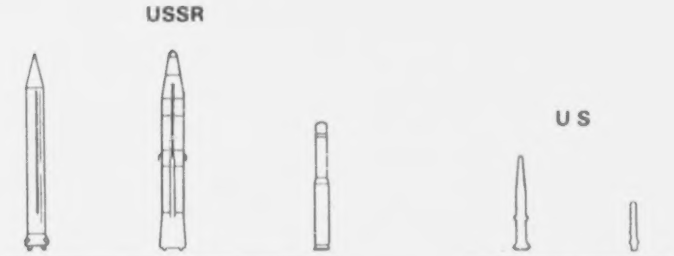
Deployment of LRINF missiles will increase NATO's nuclear capability significantly and help offset SS-20 deployments. Both the PERSHING II and GLCM systems have ranges that exceed those of other NATO systems deployed in Europe and incorporate technologies which make them effective against critical targets. The PERSHING II missile provides an additional capability because of its ability to strike time-urgent targets.

GROUND-LAUNCHED CRUISE MISSILE TEL

As shown in Chart III-10, the PERSHING II and GLCM do not compensate fully for deployed Soviet LRINF capabilities. Soviet SS-20 systems, with three independently targeted warheads per missile, already greatly

SS-20 SYSTEM

LONGER-RANGE INF MISSILES



	SS - 4	SS - 5	SS - 20	PERSHING II	GLCM
WARHEADS	1	1	3 MIRV	1	1
RANGE (KM)	2,000	4,100	5,000	1,800	2,500
OPERATIONAL FLIGHT TIME	MINUTES	MINUTES	MINUTES	MINUTES	HOURS
OPERATIONAL MODE	FIXED	FIXED	MOBILE	MOBILE	MOBILE
GLOBAL NUMBERS DEPLOYED	224	13	378	9	16
YEAR OPERATIONAL	1959	1961	1977	1983	1983

AS OF 1 JANUARY 1984

CHART III-10

outnumber the weapons that would be made available by NATO LRINF deployments (Chart III-11). SS-20 refires and the availability of older SS-4 and SS-5 systems further contribute to the imbalance. In addition, the SS-20 has a much greater range than any NATO LRINF system. As shown on Map III-1, the SS-20 can cover the entire European theater, all of East Asia, and other vital areas. The SS-20 can reach significant targets in Western Europe, even when deployed beyond the NATO LRINF range.

Shorter-Range Intermediate-Range Nuclear Forces

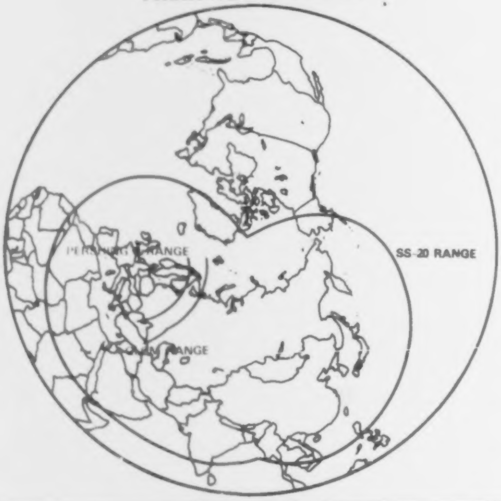
Shorter-range intermediate-range nuclear forces (SRINF) have ranges from beyond the immediate battlefield to 1,800 km. Withdrawal of US PERSHING IA missiles from Europe began in December 1983 in conjunction with the deployment of the PERSHING II and GLCM systems. With this reduction, the German PERSHING IA missiles will be the only SRINF missiles available to NATO.

The Soviet modernization of SRINF systems continues. Deployment of the SS-23 missile, with its improved accuracy, will significantly increase the number and capability of SRINF systems facing NATO. The total number of SRINF missiles available to the Warsaw Pact is expected to increase significantly by the end of the decade. Soviet/Warsaw Pact SRINF systems are projected to outnumber those of NATO with these increases and with the withdrawal of the US PERSHING IA missiles. In addition, the Soviets have stated their intention to deploy additional operational missiles to Eastern Europe as part of their response to PERSHING II and GLCM deployments.

Intermediate-Range Nuclear Forces Aircraft

Intermediate-range nuclear forces aircraft are those land-based nuclear-capable aircraft with less than inter-

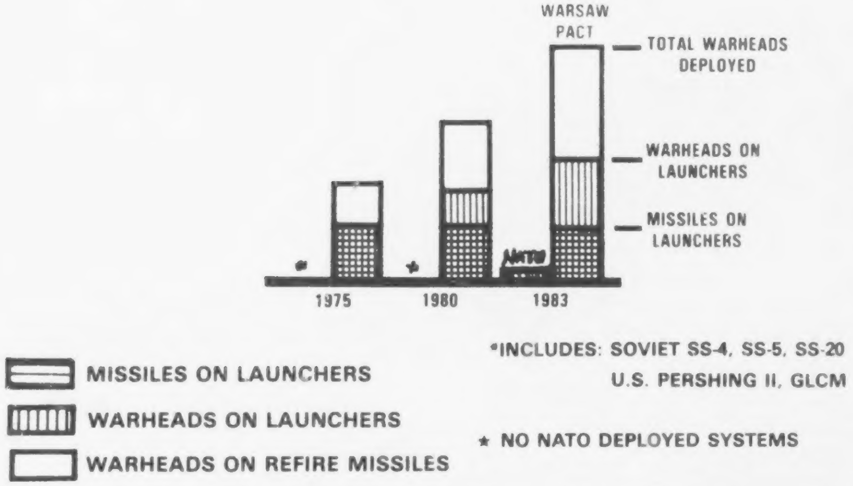
PERSHING II AND GLCM COVERAGE
& SS-20 COVERAGE
FROM SOVIET BASES



AS OF 1 JANUARY 1984

MAP III-1

NATO—WARSAW PACT
LONGER-RANGE INF MISSILES*
WORLDWIDE

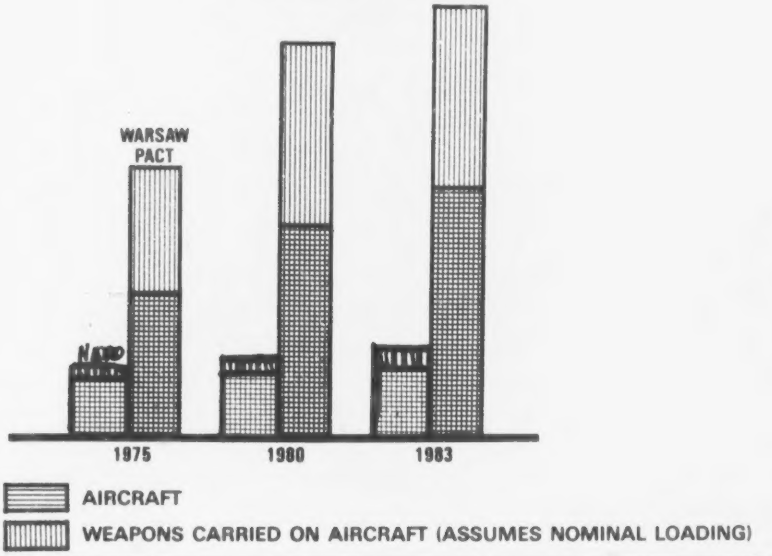


*INCLUDES: SOVIET SS-4, SS-5, SS-20
U.S. PERSHING II, GLCM

★ NO NATO DEPLOYED SYSTEMS

AS OF 1 JANUARY 1984 *CHART III-11*

NATO—WARSAW PACT
INF AIRCRAFT
EUROPE



AS OF 1 JANUARY 1984 *CHART III-12*

continental range. Dual-capable aircraft (DCA) make up the preponderance of the INF systems capable of delivering nuclear weapons beyond the immediate battlefield. Both the Warsaw Pact and NATO rely heavily on these systems, although as can be seen from Chart III-12, the Warsaw Pact holds a significant numerical advantage. NATO will continue to make qualitative and quantitative improvements in its INF aircraft, such as the F-16 and TORNADO. The F-111 and TORNADO are the only INF aircraft available to NATO which have the ability to penetrate enemy defenses at low altitude in a day or night all-weather environment. In addition, although the F-111 has a radius of action equivalent to the range of LRINF missile systems, other NATO INF aircraft are limited to SRINF-equivalent ranges.

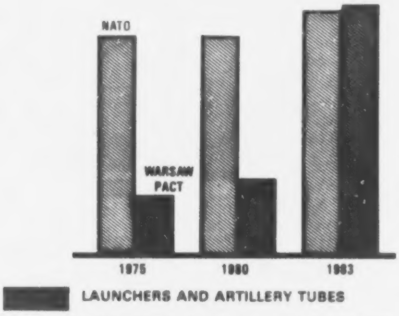
The Warsaw Pact's numerical advantage in INF aircraft is projected to be rather stable. Changes to these Soviet systems for the next few years involve the introduction of newer, more capable systems, and the phasing out of older ones. As with NATO systems, most Warsaw Pact INF aircraft are limited to SRINF-equivalent ranges. Only the BLINDER and BADGER are capable of longer ranges.

Among the systems capable of delivering nuclear weapons beyond the immediate battlefield, only the INF aircraft have both a nuclear and conventional role. Because of possible attrition during conventional operations and the fact that not all INF aircraft are committed to the nuclear role, the actual number of DCA available would depend on the nature and sequence of the aggressor's attack.

Short-Range Nuclear Forces

In the past, NATO has had a clear advantage over the Warsaw Pact in the number of deployed short-range nuclear force (SNF) delivery systems — missiles, rockets, and artillery capable of striking targets only in the general battlefield area (Chart III-13). This advantage was due mainly to the large NATO inventory of dual-capable 155mm cannon. Since the mid-1970s, however, the Soviets have fielded three nuclear-capable cannon (152mm gun, 203mm gun, and 240mm self-propelled mortar). In addition, the older 152mm howitzer is now considered nuclear-capable. These tube systems are complemented by a new nuclear missile, the SS-21, designed to replace the FROG 7. When the planned Soviet

NATO—WARSAW PACT
SHORT-RANGE NUCLEAR FORCES*
EUROPE



* INCLUDES: SOVIET SS-1, SS-21, FROG, 203MM, 240MM, 152MM SYSTEMS
NON-SOVIET WARSAW PACT SS-1, SS-21, FROG
U.S. LANCE, 8 INCH, 155MM
NON-U.S. NATO LANCE, HONEST JOHN, 8 INCH, 155MM

DOES NOT INCLUDE FRENCH FORCES

AS OF 1 JANUARY 1984

CHART III-13

SS-21 TEL

deployments of these weapons are completed, they will represent a significant increase over current levels.

The United States is also engaged in programs to upgrade its SNF systems with modernized artillery-fired atomic projectiles (AFAP) and LANCE warheads. The modernized 8-inch AFAP (W-79) is already in production and has greatly increased range, better fuzing, and improved control features compared to the currently deployed round. Moreover, it provides increased military effectiveness while reducing collateral damage. Because the W-79 eliminates the need for field assembly and the firing of a special spotting round, field artillery battalions armed with the new 8-inch round could be more responsive and effective. The round is presently being stockpiled in US territory.

Compared to other SNF systems, the large number of 155mm delivery systems in Europe increase by a factor of five the number of potential SNF delivery systems with which Soviet planners must contend. The W-82 modernized 155mm AFAP is in the final stages of development. This weapon is designed to replace the W-48, which has been in the field for 20 years and is nearing the end of its useful life. The W-82 offers higher yields, increased ranges, and significantly improved military effectiveness.

The LANCE, with its 115 km range, remains the longest range SNF system. With its improved warhead, the LANCE will provide the ground commander a significant deterrent capability and the ability to threaten the massed armored formations favored in Soviet doctrine. The new LANCE warhead is also being stockpiled in US territory.

LANCE MISSILE

Sea-Based Nuclear Forces

Sea-based nuclear forces consist of strike, air defense, and antiship and antisubmarine warfare systems. Nuclear-capable sea-launched cruise missiles (TLAM/N) will be deployed aboard attack submarines and selected surface ships this year. Additionally, carrier-based A-6 and A-7 aircraft provide the United States with a flexible nuclear land-attack capability and a significantly enhanced nuclear antisurface ship capability. Other missile systems and aircraft-delivered nuclear depth bombs have an antiair and antisubmarine role. A nuclear war-

SEA-LAUNCHED CRUISE MISSILE

head is under development for the SM-2 surface-to-air missile. The nuclear-equipped SM-2 will replace the outdated nuclear-equipped TERRIER missile. In addition, an antisubmarine standoff weapon is under development.

Other Nuclear Forces

The United Kingdom maintains an SLBM force consisting of four SSBNs, each of which carries 16 POLARIS A-3 missiles. The UK plans to purchase US TRIDENT missiles to replace its POLARIS systems in the 1990s. France is not part of the NATO military organization but maintains an independent nuclear capability.

Command and Control

US Command and Control

US unilateral NSNF command and control systems must provide positive control and custody over US nuclear weapons. Present NSNF command and control systems are being improved.

Soviet Command and Control

For a conflict involving both conventional and nonstrategic nuclear forces, the Soviets are equipped with a command and control system that provides direct control over field forces by the Soviet high command. Theater force communication networks are integral to national command communication networks. Soviet command and control capabilities are highly survivable, redundant, and flexible. In addition, the Soviets are maintaining vigorous research and development programs to upgrade such systems.

CHAPTER IV. THE MILITARY BALANCE: CONVENTIONAL FORCES

INTRODUCTION

A powerful nuclear capability alone is inadequate to protect US global interests. Events have demonstrated that potential adversaries of the United States are willing to pursue their objectives with military force even in the face of overwhelming US nuclear capabilities.

Strong US conventional forces are essential to help deter direct military attacks, particularly against US allies and interests overseas. Deployed conventional forces provide highly visible evidence of the US commitment to deter and, if necessary, counter military attacks against US interests at all levels of conflict. Should deterrence fail, conventional forces would be employed to respond rapidly to enemy attacks, limit the scope of conflicts, and terminate hostilities on terms favorable to the United States and its allies. Modern, well-balanced, and mobile conventional forces increase the options available to the NCA during regional crises.

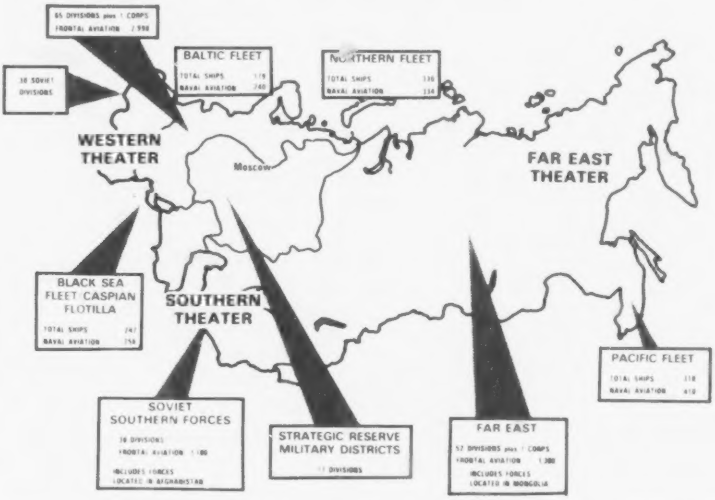
This chapter provides an overview of conventional theater forces, assesses selected regional military balances, highlights relevant force programs, and discusses considerations for employing and supporting the forces.

GLOBAL OVERVIEW

Conventional Military Posture of the Soviet Union

The Soviets maintain the world's largest active armed forces and are deploying them beyond Soviet borders more frequently. Soviet forces deployed in Eastern Europe, together with other Warsaw Pact forces, constitute the major conventional military threat to the Western allies. Major air and land forces are also stationed in the military districts facing Southwest Asia and the Chinese border (Map IV-1). The Soviets also maintain a significant military presence in Cuba, the Middle East, Africa, and Southeast Asia. Further, they provide security assistance on an extensive scale and use surrogate forces to project their military power.

SOVIET CONVENTIONAL FORCES


65 DIVISIONS plus 1 CORPS
FRONTAL AVIATION 2,990
30 SOVIET DIVISIONS
BALTIC FLEET
TOTAL SHIPS 179
NAVAL AVIATION 240
NORTHERN FLEET
TOTAL SHIPS 136
NAVAL AVIATION 334
WESTERN THEATER
Moscow
FAR EAST THEATER
BLACK SEA FLEET CASPIAN FLOTILLA
TOTAL SHIPS 247
NAVAL AVIATION 256
SOUTHERN THEATER
PACIFIC FLEET
TOTAL SHIPS 318
NAVAL AVIATION 410
SOVIET SOUTHERN FORCES
30 DIVISIONS
FRONTAL AVIATION 1,100
INCLUDES FORCES LOCATED IN AFGHANISTAN
STRATEGIC RESERVE MILITARY DISTRICTS
11 DIVISIONS
FAR EAST
52 DIVISIONS plus 1 CORPS
FRONTAL AVIATION 1,300
INCLUDES FORCES LOCATED IN MONGOLIA

AS OF 1 JANUARY 1984

MAP IV-1

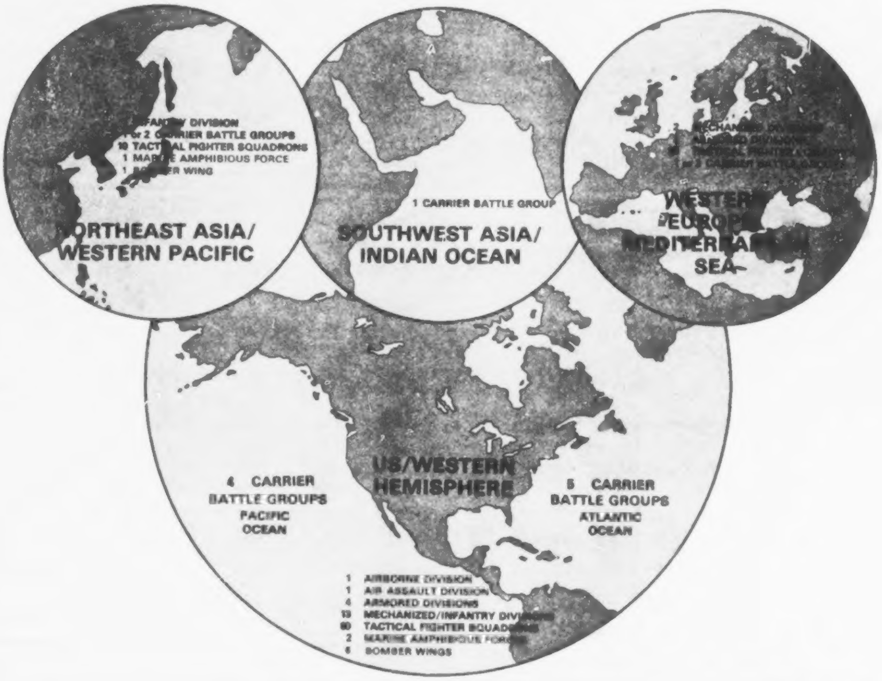
Conventional Military Posture of the United States

The wide dispersion of US interests requires the United States to project its military capabilities on a global basis. To meet worldwide responsibilities, the US military strategy requires forward-deployed US forces — supported by regional allies where possible — which are backed by a rapidly deployable reserve. Major US ground, air, and naval forces are currently forward deployed as shown on Map IV-2. The majority of the remaining US active component and virtually all reserve component forces remain in the continental United States as the central reserve. These latter forces, rapidly deployable using airlift and sealift, provide the NCA the flexibility to shift US forces as contingencies arise.

The largest forward-deployed US contingent is in the European theater, where NATO faces the highly capable forces of the Warsaw Pact. A large, dispersed force of US ground, air, and naval units is also deployed in the Western Pacific. Fewer air and naval forces are deployed to the Indian Ocean area to protect regional sea lines of communication (SLOCs), and a limited presence is maintained in Panama to support US interests in Latin America.

The effectiveness of the US strategy depends not only on a system of forward-deployed forces but also on close cooperation with regional allies. In addition to their own military forces, these allies provide basing and overflight rights, facility arrangements, and support personnel to assist US forces.

US CONVENTIONAL FORCES


INFANTRY DIVISION
1 or 2 CARRIER BATTLE GROUPS
10 TACTICAL FIGHTER SQUADRONS
1 MARINE AMPHIBIOUS FORCE
1 BOMBER WING
NORTHEAST ASIA/
WESTERN PACIFIC
1 CARRIER BATTLE GROUP
SOUTHWEST ASIA/
INDIAN OCEAN
MECHANIZED DIVISIONS
ARMORED DIVISIONS
TACTICAL FIGHTER SQUADRONS
1 or 2 CARRIER BATTLE GROUPS
WESTERN
EUROPE/
MEDITERRANEAN
SEA
4 CARRIER
BATTLE GROUPS
PACIFIC
OCEAN
US/WESTERN
HEMISPHERE
5 CARRIER
BATTLE GROUPS
ATLANTIC
OCEAN
1 AIRBORNE DIVISION
1 AIR ASSAULT DIVISION
4 ARMORED DIVISIONS
13 MECHANIZED/INFANTRY DIVISIONS
80 TACTICAL FIGHTER SQUADRONS
2 MARINE AMPHIBIOUS FORCES
5 BOMBER WINGS

AS OF 1 JANUARY 1984 ***MAP IV-2***

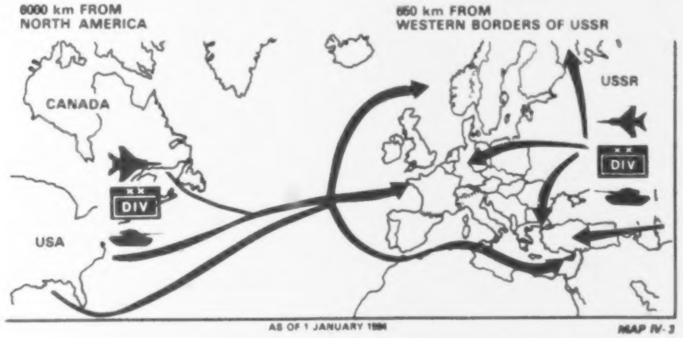
REGIONAL BALANCES

NATO and Western Europe

Although the United States and its NATO allies have made significant improvements in the forces defending Western Europe, the Warsaw Pact continues to upgrade and enlarge its forces at a greater pace. The numerical advantage long enjoyed by the Warsaw Pact continues, while the qualitative advantage long held by NATO is eroding.

Warsaw Pact forces are capable of attacking NATO forces along a line extending from northern Norway south to Turkey. The Warsaw Pact could be reinforced

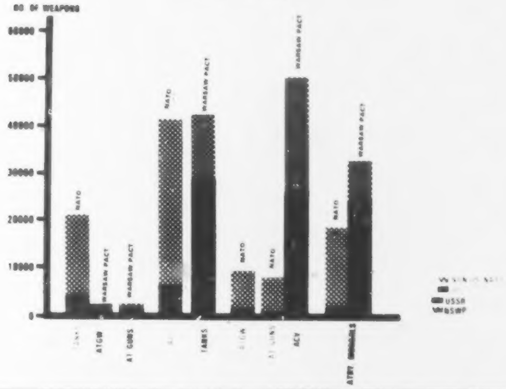
NATO-WARSAW PACT REINFORCEMENT


6000 km FROM
NORTH AMERICA
650 km FROM
WESTERN BORDERS OF USSR
CANADA
USA
USSR
DIV
DIV

AS OF 1 JANUARY 1984

MAP IV-3

NATO-WARSAW PACT GROUND FORCES (IN PLACE)



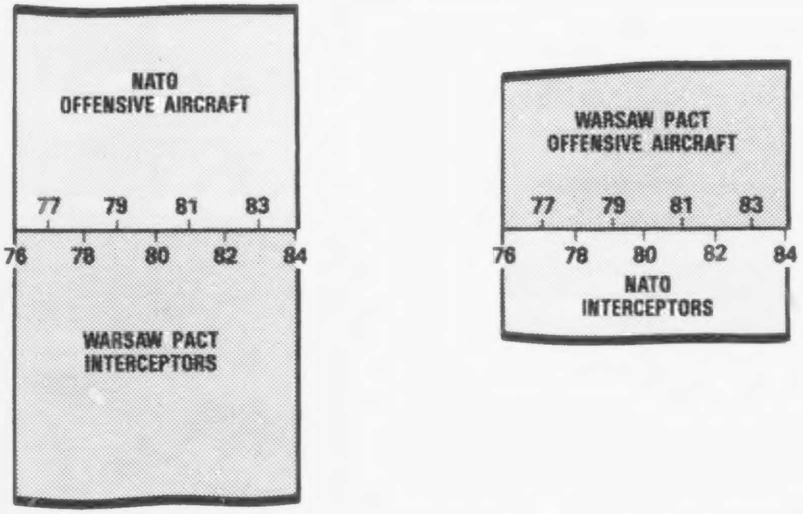
AS OF 1 JANUARY 1984

CHART IV-1

with larger numbers and in a shorter time than NATO, particularly if there were little tactical warning. Map IV-3 illustrates the difference in the distances involved between a US reinforcement of NATO and a Soviet reinforcement of Eastern Europe.

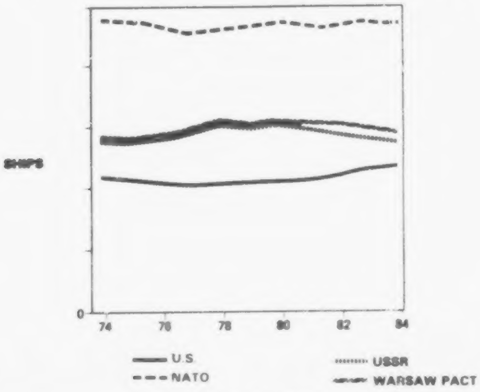
Chart IV-1 shows the ground forces and equipment in place in the European theater. The NATO data include French and Spanish forces which, although not part of the integrated military structure of the Alliance, do represent a significant contribution to the defense of Europe. Only US and Soviet forces designated for the European theater are included. Charts IV-2 and IV-3 compare recent trends in the naval and tactical air balances in the European theater.

NATO vs WARSAW PACT
(AIRCRAFT)



AS OF 1 JANUARY 1984 *CHART IV-2*

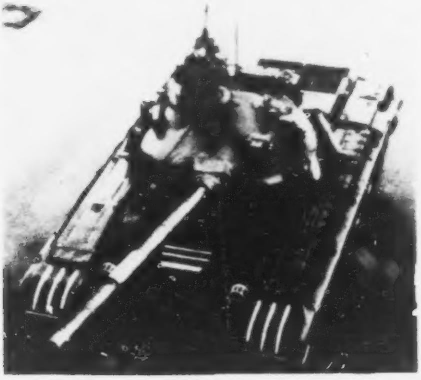
PRINCIPAL SURFACE COMBATANTS



AS OF 1 JANUARY 1984

CHART IV-3

Trends in ground force equipment continue to favor the Warsaw Pact. The modernization of Soviet armor, air defense, artillery, and antitank systems is especially significant. The Warsaw Pact currently has more than a two-to-one advantage over NATO in tanks as a result of high Soviet production rates. The Pact advantage over NATO in artillery, mortars, and rocket systems is approaching two-to-one. The number of Warsaw Pact air defense systems in Europe is also high and the ratio of Warsaw Pact air defense systems to NATO tactical air forces is increasing at a significant rate.



T-80 TANK

The balance of air forces in Europe is fairly stable. NATO has a slight edge in numbers of tactical air-to-ground systems, but faces a significant numerical disadvantage in air-to-air fighters. The qualitative advantage of NATO's tactical air weapon systems helps offset existing imbalances in total numbers of aircraft. Of growing concern, however, is the imbalance between NATO and Eastern Europe in the sheltering of combat air forces. The Warsaw Pact has twice as many hardened aircraft shelters as NATO.

SOVIET FLOGGER G

Soviet naval forces pose a threat to US and allied forces operating in the North Atlantic and other maritime approaches to Europe. Both Soviet Naval Aviation (SNA) and Strategic/Theater Air Armies will continue to have maritime strike tasks.

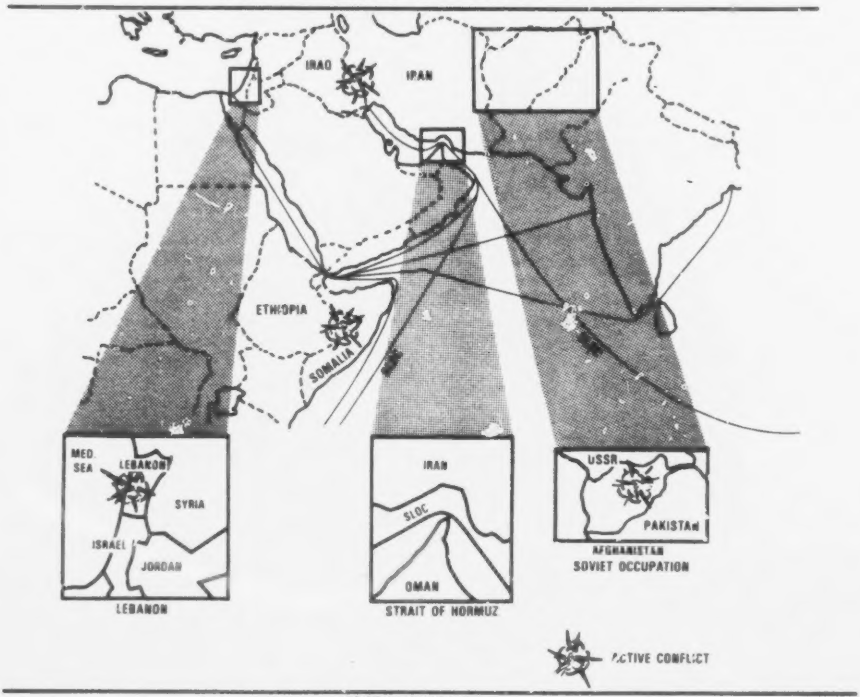
NATO's competent and flexible forces continue to deter attack by the Warsaw Pact despite disparities in size and other military capabilities. Should deterrence fail, the military success of the NATO Alliance will depend heavily upon a timely decision to mobilize and deploy forces, the time available for mobilization, the en route survivability of US reinforcements, and the sufficiency of munitions and other consumable supplies available in the theater.

Middle East and Southwest Asia

The Middle East and Southwest Asia contain a large percentage of the world's known petroleum reserves and oil production. Continued Free World access to the region and these oil resources is a vital concern of the United States. Regional stability and the limitation of Soviet influence are also important US security objectives for the area (Map IV-4).

Threats to stability within this region are numerous and complex. Local disputes, fueled by religious and nationalistic differences and complicated by social and political changes, have drawn many regional factions into armed conflict. Where possible, the Soviets have attempted to exploit these differences in ways inimical to the interests of the United States and its friends. Three major conflicts persist. Serious differences remain among factions in Lebanon. If not resolved, these differences could lead to even greater tensions in the region. In the Persian Gulf area, the Iran-Iraq war continues. This war could increase in intensity and scope, thus endangering other Gulf states and oil fields and threat-

AREAS OF CONCERN
MIDDLE EAST/SOUTHWEST ASIA



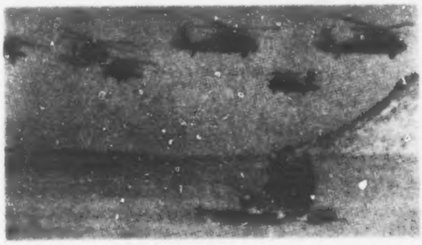
AS OF 1 JANUARY 1984

MAP IV-4

ening free passage through the Strait of Hormuz. In Afghanistan, the Soviets have established a strong, permanent military presence, increasing pressure on other nations in the region.

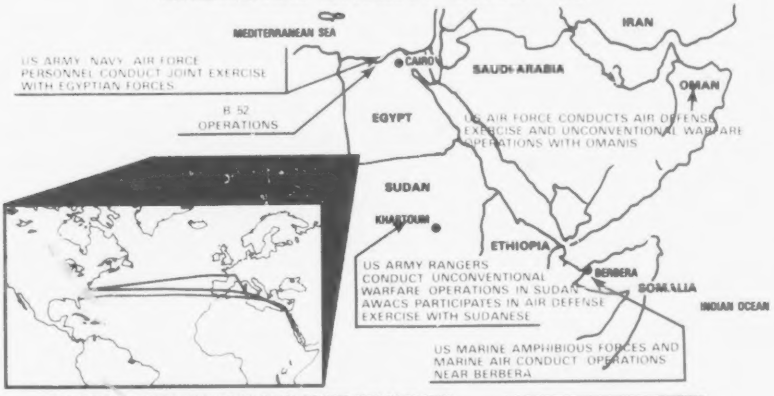
The United States participates in a number of programs to promote peace and stability in the region. Military assistance is provided to friendly nations to build up their capabilities to protect themselves and to help deter intraregional conflict. In the Middle East, the United States and other nations are contributing to regional stability through the deployment of multinational peacekeeping forces. (Chapter V contains a discussion of peacekeeping efforts.) The United States continues to maintain naval forces in the Indian Ocean, and US ground and air forces periodically conduct exercises with regional allies. One such exercise is BRIGHT STAR, which is highlighted on Map IV-5. US allies outside the region, such as France and the United Kingdom, also provide security assistance and a military presence.

The Soviets actively pursue an expanded role in the region. They have extensive security assistance programs, particularly in Syria, and maintain a continuous military presence in Southwest Asia through access to ports and basing facilities. The Soviets have also de-



BRIGHT STAR-83

EXERCISE BRIGHT STAR—83*


MEDITERRANEAN SEA
IRAN
US ARMY NAVY AIR FORCE PERSONNEL CONDUCT JOINT EXERCISE WITH EGYPTIAN FORCES
CAIRO
SAUDI ARABIA
OMAN
B 52 OPERATIONS
EGYPT
US AIR FORCE CONDUCTS AIR DEFENSE EXERCISE AND UNCONVENTIONAL WARFARE OPERATIONS WITH OMANIS
SUDAN
KHARTOUM
ETHIOPIA
US ARMY RANGERS CONDUCT UNCONVENTIONAL WARFARE OPERATIONS IN SUDAN AWACS PARTICIPATES IN AIR DEFENSE EXERCISE WITH SUDANESE
BERBERA
SOMALIA
INDIAN OCEAN
US MARINE AMPHIBIOUS FORCES AND MARINE AIR CONDUCT OPERATIONS NEAR BERBERA
— AIR LOC (6,000 MILES) APPROXIMATELY 5500 TROOPS AIRLIFTED FROM US TO EGYPT
····· SEA LOC (7,000 MILES) EQUIPMENT FOR A MECHANIZED INFANTRY BATTALION LIFTED TO EGYPT ENGINEER EQUIPMENT LIFTED TO SOMALIA

* 26,000 US PERSONNEL AND 32,400 TONS OF EQUIPMENT DEPLOYED

AS OF 1 JANUARY 1984

MAP IV-5

ployed over 8,000 advisors in the region. The greatest threat the Soviets could present to Southwest Asia would be an armed invasion of the region with the aim of controlling the Persian Gulf.

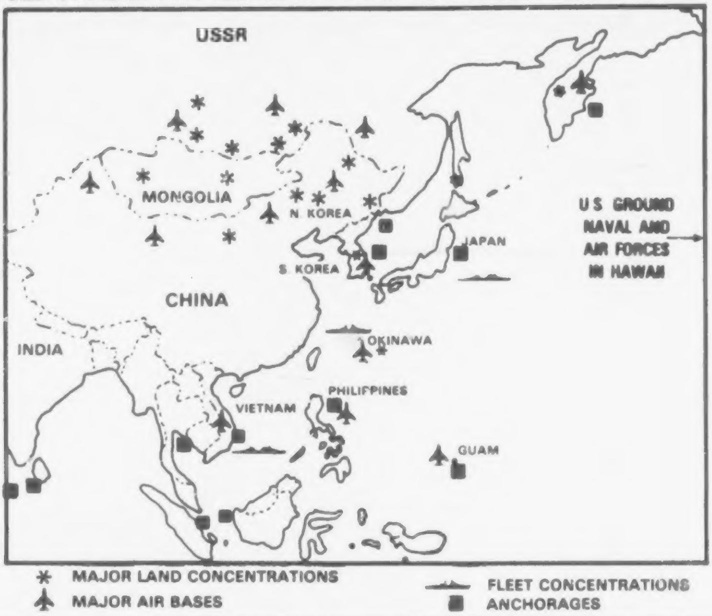
In view of the significant Soviet forces which could be rapidly employed against selected nations of the region, the United States has taken steps to enhance its capability to deploy and sustain military forces in the area. The US Central Command (USCENTCOM) was established to coordinate all US military activities in the Southwest Asia region and to control any military forces that might be deployed there. The capability and determination of US and other Free World forces to defend their interests in the region will remain a major deterrent to further Soviet aggression.

Pacific

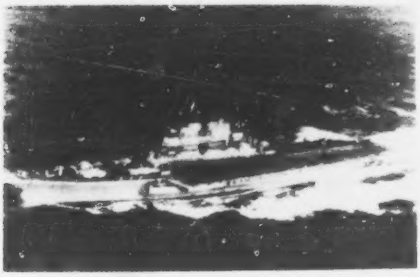
US security interests in the Asian-Pacific region include the strengthening of collective defense with allies, promotion of regional stability, maintenance of strong economic ties, and free access to and within the area.

Map IV-6 shows dispositions of selected forces in the Pacific. Soviet forces pose the greatest threat to US and allied interests in the region. The Soviets possess numerical superiority in nearly every category of weapon system. They have made qualitative and quantitative improvements in their forces dedicated to the area (Chart IV-4). The Soviets also are deploying their largest and most sophisticated naval combatants to the Pacific and are actively pursuing alliances in the region. These efforts have resulted in an increased Soviet presence in

MAJOR POWER BALANCE IN EAST ASIA AND THE PACIFIC


USSR
MONGOLIA
N. KOREA
S. KOREA
JAPAN
CHINA
INDIA
OKINAWA
PHILIPPINES
VIETNAM
GUAM
U.S. GROUND NAVAL AND AIR FORCES IN HAWAII
MAJOR LAND CONCENTRATIONS
MAJOR AIR BASES
FLEET CONCENTRATIONS
ANCHORAGES

AS OF 1 JANUARY 1984 MAP IV-6

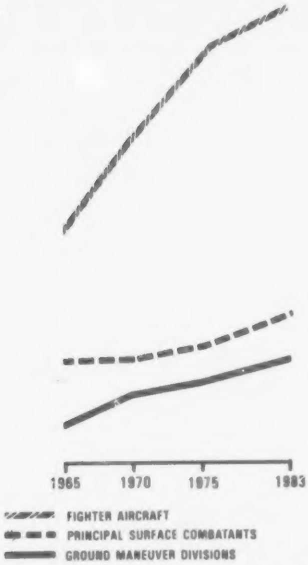


SOVIET KIEV-CLASS CARRIER

Vietnam, from where they undertake missions along sea lanes leading to the Indian Ocean. Although the majority of Soviet land forces are positioned along the Sino-Soviet border, their presence greatly influences the military balance in Northeast Asia. The Soviets actively intimidate US allies in the region and support the aggressive policies of Vietnam and North Korea.

GROWTH OF SOVIET FORCES IN THE FAR EAST

(APPROX 30% OF TOTAL SOVIET FORCES)



AS OF 1 JANUARY 1984 CHART IV-4

The North Koreans have vowed to reunite the Korean Peninsula under one government. The buildup of their armed forces consumes 20 percent of North Korea's annual GNP and continues at a rate beyond that required for legitimate defensive purposes. The North Koreans deploy about half their combat forces near the border of the Republic of Korea (ROK). They stress mobility, firepower, and shock action and maintain the capability to launch an offensive on short notice. The ROK continues its efforts to achieve an independent capability to resist aggression but still requires strong US support to deter or counter a North Korean attack. The United States forward deploys an Army division plus air and naval forces in Korea. Chart IV-5 provides a comparison of the major forces on the Korean Peninsula. Forces of the two allies are integrated into a single command structure, the Combined Forces Command. Major exercises, such as TEAM SPIRIT, demonstrate allied cooperation and US reinforcement potential.

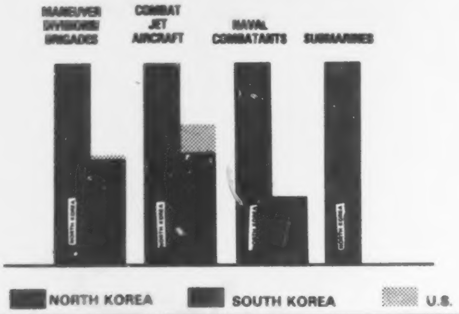
The Vietnamese have the largest armed forces in Southeast Asia. Soviet economic and military assistance, now estimated to exceed three million dollars per day, sustains the Vietnamese economy and supports its aggression in Kampuchea. An estimated 150,000 to 170,000 Vietnamese troops continue to occupy Kampuchea, creating tension along the border of Thailand and exacerbating the refugee situation there. Vietnam is viewed as a threat independent of its Soviet alliance because of its military strength and aggressive policies throughout Southeast Asia.

There is a common interest among the United States and its Asian-Pacific allies and friends to promote peace and stability in the region. In view of growing threats to regional security, close defense cooperation and collective efforts are essential. The United States maintains important bilateral security arrangements with Japan, Republic of Korea, Thailand, and the Philippines, and plays an active role in defense of the Southwest Pacific under the ANZUS Treaty with Australia and New Zealand.

The continued use of facilities in the Philippines is important to the protection of US interests in the region. In 1983, the United States and the Philippines reaffirmed continued US use of bases in that country.

The Japanese are constitutionally restricted to maintaining only a defensive military force. The Japanese Self-Defense Forces, although well-equipped and well-trained, remain small. Japanese defense budgets are increasing slowly in recognition of the threat. Japan will continue to rely on the United States to counter any serious military threat. US bases in Japan continue to play a vital strategic role in providing US forces continuous access to the region.

COMPARISON OF US / SOUTH KOREAN FORCES AND NORTH KOREAN FORCES



AS OF 1 JANUARY 1984

CHART IV-5

A nonhostile, nonaligned China represents an important counterbalance to Soviet influence in East Asia. The size of the Chinese military force requires both the Soviet Union and Vietnam to allocate resources for possible China contingencies.

The United States maintains carrier battle groups in the Pacific and Indian Oceans and air and ground forces elsewhere in the region. These forward-deployed forces demonstrate a commitment to friends and allies, provide immediate forces necessary to meet treaty commitments, and buy time for needed reinforcements.

Maritime Balance

During the past three decades, the Soviet Navy has grown in size and capability while gradually expanding its maritime mission from coastal defense and protection of European flanks to more open-ocean tasks. The size of the US Navy, on the other hand, decreased in both numbers of ships (50 percent) and overall tonnage (20 percent) from the late 1960s to the late 1970s, although the maritime threat continued to grow. Only recently has the United States taken major steps to halt this decline and reestablish Navy strength adequate to its assigned tasks.

Consistent with the US strategy of forward deployment and the requirement to reinforce NATO, the US Navy maintains forces capable of seeking out and destroying enemy naval forces, maintaining local air and sea control, projecting forces ashore, supporting ground forces, and transporting forces and supplies. The warfighting capability of the US fleet is improving; however, the commitments of the US Navy have also expanded. Consequently, all tasks cannot be accomplished simultaneously. In many regions of the world, allied cooperation will be crucial to meeting alliance commitments.

US CARRIER BATTLE GROUPS

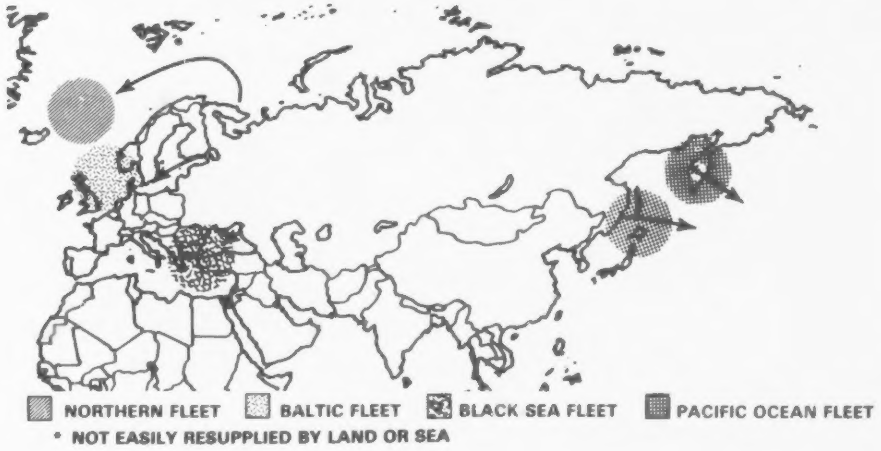
The Soviet Navy concentrates its forces on sea control of waters contiguous to the USSR and conducts selected sea denial operations as far as 2,000km from its coasts. Recently the Soviets have been developing forces for more extensive open-ocean sea control, SLOC interdiction, and projection of forces.

The open-ocean effectiveness of Soviet naval forces will continue to be adversely affected by geographic constraints, as shown on Map IV-7. The four Soviet fleets — Northern, Baltic, Black Sea, and Pacific — are widely separated and must traverse considerable distances or transit choke points to reach the open ocean. Charts IV-6 through IV-9 compare selected US and Soviet naval force trends. In their surface fleet, the Soviets have committed themselves to larger-displacement warships; increased sea-based air capabilities; and greater firepower, endurance, and sustainability. They are also expected to place heavy emphasis on incorporation of antiship, antisubmarine, and antiair weapon systems in their new cruisers and guided-missile destroyers. Another significant portion of Soviet naval strength lies in its general-purpose submarine force, consisting of both torpedo-attack and cruise-missile units. The Soviets are believed to be embarked on a major program to modernize and expand their nuclear-powered attack submarine (SSN) force. Soviet land-based bombers also continue to pose a threat to US and allied surface vessels.

SOVIET SLAVA-CLASS CRUISER

SOVIET BACKFIRE BOMBER

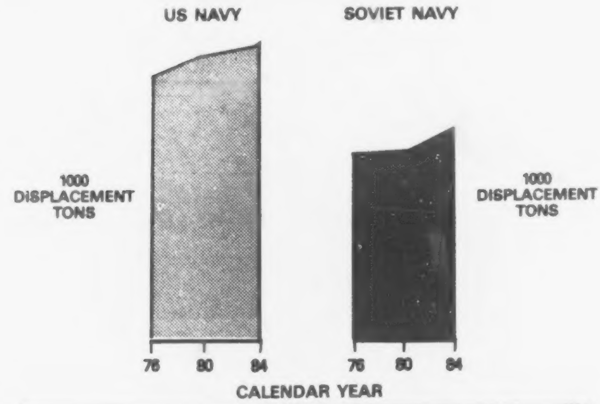
GEOGRAPHIC CONSTRAINTS ON SOVIET NAVAL OPERATIONS



AS OF 1 JANUARY 1984

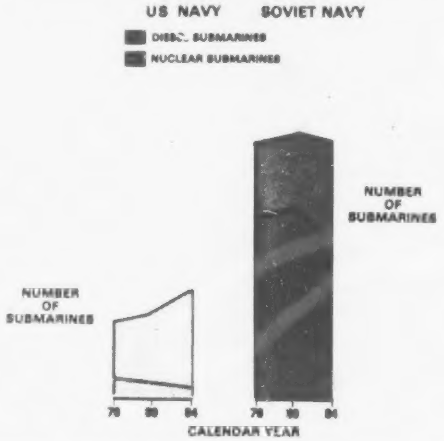
MAP IV-7

PRINCIPAL SURFACE COMBATANTS
(LESS AIRCRAFT CARRIERS)
AVERAGE DISPLACEMENT



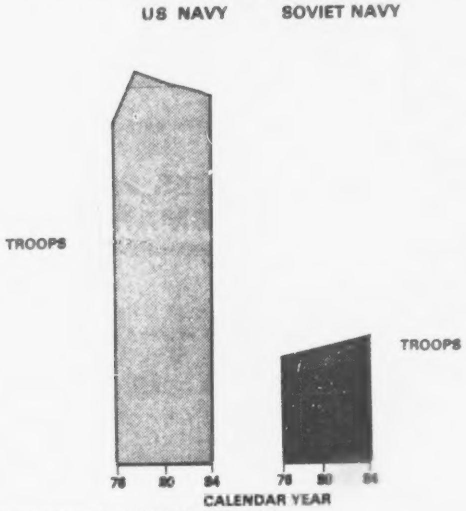
AS OF 1 JANUARY 1984 *CHART IV-6*

GENERAL PURPOSE SUBMARINES



AS OF 1 JANUARY 1984 *CHART IV-7*

US AND SOVIET AMPHIBIOUS LIFT CAPABILITY*

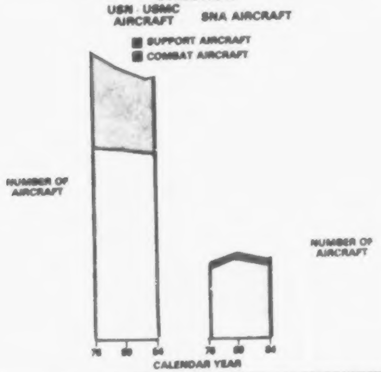


* SHIPS WITH A RANGE IN EXCESS OF 500 NM

AS OF 1 JANUARY 1984

CHART IV-8

U.S. AND SOVIET NAVAL AIRCRAFT TRENDS



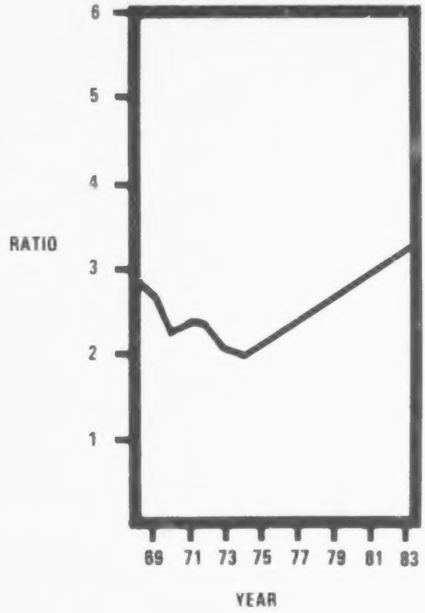
AS OF 1 JANUARY 1984

CHART IV-9

The US Navy possesses a significant advantage over the Soviet Navy in open-ocean antisurface warfare when operating under the umbrella of carrier-based tactical air support. Air Force B-52 aircraft can now provide added open-ocean support against enemy surface targets. US antisubmarine warfare (ASW) forces include surface combatants, submarines, and land-based aircraft. Chart IV-10 illustrates the US improvements against the Soviet submarine threat. In response to the SNA threat, the US Navy employs a layered antiair warfare (AAW) defense that includes interceptor aircraft, area and point defense missile systems, and close-in weapon systems.

Improvements in US capabilities relative to the Soviets will continue. The US Navy will maintain its open-ocean superiority and continue to improve its capability to operate in high threat areas while performing offensive missions in support of allies and forces ashore.

US ASW FORCES PER SOVIET GP SUBMARINE



AS OF 1 JANUARY 1984 ***CHART IV-10***

COMPONENT FORCES

Ground Forces

Because of the diversity of threats to US interests worldwide, ground forces must be capable of conducting missions across the entire spectrum of conflict. The US Army has undertaken interrelated programs designed to improve its force structure, modernize its capabilities, and further enhance the readiness of its forces.

Armored and mechanized divisions designated for NATO missions are being organized as heavy divisions under the Division 86 concept and are incorporating modern weapons such as the ABRAMS tank. Tests are under way to determine the best organization and equipment for divisions capable of rapid deployment worldwide. The first conversion of an existing infantry division to a light division of 10,000 men will occur in 1984. The reserve components also will be improved by these programs. These organizational activities will be accomplished while the modernization program continues at a strong pace. The major components of the Army modernization program are outlined in Chart IV-11.

The Soviets continue to improve the quality of their ground forces, fielding new weapons as capable as many current US systems. They have outproduced the United States in tanks at a rate of nearly four-to-one for the last 10 years. Three new medium tanks are appearing in the Soviet inventory. All three feature innovations in armor protection and fire control and increased mobility. Two of the tanks can fire conventional antitank ammunition as well as antitank guided missiles (ATGM) through the main guns, thus providing an increased long-range antitank capability. Although the M-1 ABRAMS tank currently being fielded by the United States is generally superior to the T-80 and other Soviet tanks, significant quantities will not be available until FY 1987.

ABRAMS TANKS

The Soviets have a two-to-one advantage in numbers of ATGMs and their technology is nearly on a par with that of the United States. Soviet vehicles with improved laminated armor are also less vulnerable to current ATGMs. Both the United States and the Soviet Union are engaged in an intensive effort to improve ATGM armor-piercing capabilities. The Soviets will continue to

GROUND FORCE SYSTEMS MODERNIZATION

SYSTEM NAME	***DESCRIPTION***	***STATUS***
M-1 ABRAMS TANK	MAIN BATTLE TANK	IN FULL PRODUCTION. FIELDING COMPLETE IN 1991
BRADLEY FIGHTING VEHICLE (M-2/3)	ARMORED/FIGHTING PERSONNEL CARRIER	IN PRODUCTION. FIELDING COMPLETE IN 1992
AH-64 APACHE	ANTIARMOR ATTACK HELICOPTER	IN PRODUCTION. INITIAL BUY COMPLETE IN 1987
PATRIOT	HIGH AND MEDIUM ALTITUDE SURFACE-TO-AIR MISSILE	IN PRODUCTION. ENTERING THE FIELD
SGT YORK (DIVAD)	SHORT-RANGE, FAST REACTION DIVISION AIR DEFENSE GUN	IN PRODUCTION. ENTERING THE FIELD
MULTIPLE-LAUNCH ROCKET SYSTEM (MLRS)	SELF-PROPELLED, TRACKED MULTIPLE-ROCKET LAUNCHER/LOADER	IN PRODUCTION. ENTERING THE FIELD
HIGH MOBILITY MULTI-PURPOSE WHEELED VEHICLE	REPLACES 1¼ TON GAMA GOAT, ½ TON MULES, AND SELECTED ¼ TON JEEPS	FIELDING BEGINS FY 1985
SINCGARS	SINGLE CHANNEL VHF/FM COMBAT NET RADIO	IN PRODUCTION.

AS OF 1 JANUARY 1984

CHART IV-11

have more antitank missiles than the United States, but the US advantages will continue in night vision capabilities and armor-piercing technology.

The Soviet amphibious armored infantry combat vehicle (BMP) was the world's first infantry fighting vehicle. The US M-113 armored personnel carrier was intended only for protection and transportation of troops on the battlefield. The United States has just begun fielding the BRADLEY Fighting Vehicle which is comparable to the Soviet BMP. The BMP has the advantage of an integral nuclear, biological, chemical (NBC) protective system which allows troops to remain unmasked while they conduct operations from the vehicle.

MULTIPLE-LAUNCH ROCKET SYSTEM

Both the United States and the USSR have extensive programs to upgrade artillery forces. The Soviets are replacing several artillery systems with new self-propelled 122mm and 203mm howitzers and 240mm mortars, 152mm towed and self-propelled guns, and a new 240mm multiple-rocket launcher. These systems provide maneuver forces with protected, highly mobile, and responsive weapons well suited to mechanized operations. The United States is replacing its towed 155mm howitzers with longer range models and continuing to improve munitions for these systems. The Multiple-Launch Rocket System provides a significant improvement in US fire suppression.

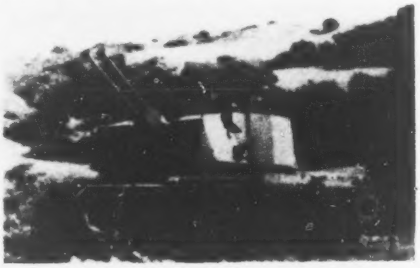
The Soviets are introducing the FROGFOOT close-air-support aircraft and expanding the capabilities of battlefield attack helicopters. To help counter air attacks on the battlefield, the US Army is introducing a new self-propelled division air defense gun, the SERGEANT YORK, in 1985. The PATRIOT missile system is now being fielded to counter saturation air attacks from all altitudes. The US Army is also expanding and improving aerial support of the battlefield with continued production of the BLACKHAWK utility helicopter and the APACHE advanced-attack helicopter, armed with the HELLFIRE antitank missile.

Combat Air Forces

The United States is continuing to improve its combat air forces through the expansion of force structure, development and procurement of new systems, and modification of existing capabilities. Although the Soviet Union will continue to have a quantitative advantage in combat aircraft, US systems will remain qualitatively superior. The Soviet Union, however, continues to improve the quality of its equipment and training.

Chart IV-12 shows US and Soviet combat aircraft by category. Some aircraft are listed in both the air-to-air and air-to-ground categories because they are dual-role capable. Over the last five years, the Soviets have consistently outproduced the United States in tactical combat aircraft, and the trend is projected to continue. Annual production rates of tactical aircraft are shown in Chart IV-13. The Soviet Union has two and one-half times as many air-to-air fighter-interceptors as the United States and is nearly equal in air-to-ground aircraft. The Soviet emphasis on the air-to-air category results from their concern for homeland defense and desire to protect their large ground force advantage in Europe.

The Soviets are conducting an extensive antiaircraft artillery system upgrade, replacing obsolete guns with the more effective ZSU-23-4 system. They are producing antiaircraft systems at a rate 15 times that of the United States and in 1984 will have one tactical SAM system for each aircraft in NATO.



SERGEANT YORK AIR DEFENSE GUN

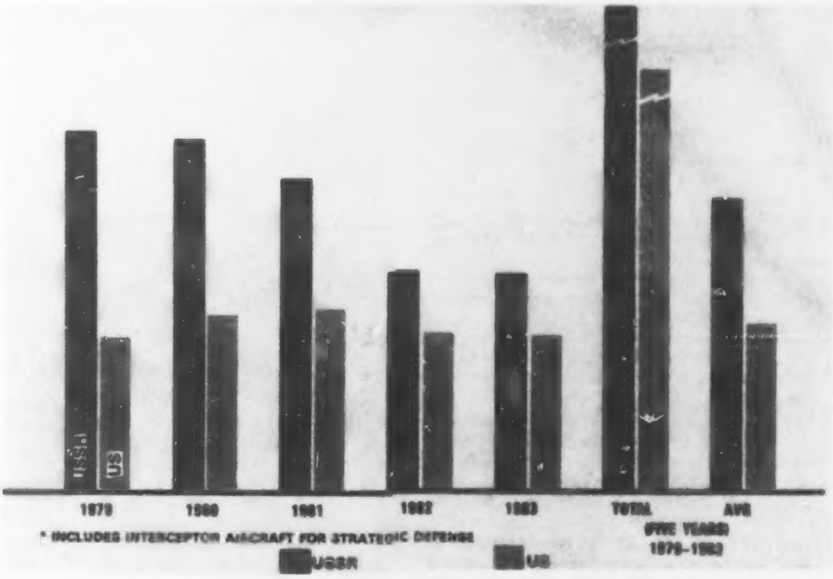
The United States is expected to maintain a qualitative edge in aircraft tactical systems, which will help compensate for numerical deficiencies. High priority

US-SOVIET COMBAT AIRCRAFT

CATEGORY	*U.S. AIRCRAFT*	*SOVIET AIRCRAFT*
AIR-TO-SURFACE	B-1, B-52	BACKFIRE, BEAR, BISON, BADGER, BLINDER
	F-111, A-6	FENCER, FITTER
	F-4, A-7, A-4, FA-18, F-16	FLOGGER, FULCRUM, FISHBED
	AV-8	FORGER
	A-10	FROGFOOT
AIR-TO-AIR	F-15, F-14, F-4	FLOGGER, FOXBAT, FLANKER, FOXHOUND, FIDDLER
	F-16, FA-18	FULCRUM, FISHBED
RECCE / EW / AWACS	RF-4, SR-71, F-14 TARPS	FITTER, FOXBAT, FISHBED
	U-2	MANDRAKE
	RC-135	BEAR
	EF-111, EA-6, EA-3	FENCER, BREWER, BADGER
	E-3A, E-2, EC-130	MAINSTAY, MOSS, CUB

AS OF 1 JANUARY 1984 *CHART IV-12*

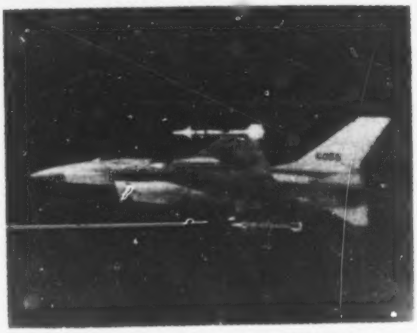
ANNUAL PRODUCTION OF TACTICAL COMBAT AIRCRAFT*
US AND USSR



* INCLUDES INTERCEPTOR AIRCRAFT FOR STRATEGIC DEFENSE

AS OF 1 JANUARY 1984 *CHART IV-13*

continues for development and acquisition of precision-guided munitions such as the Advanced Medium-Range Air-to-Air Missile (AMRAAM) and the imaging infrared MAVERICK, and avionics for night and adverse weather, e.g., the low-altitude navigation and targeting infrared system (LANTIRN). Radar and communications equipment for the F-14, F-15, and F-16 aircraft are being upgraded in the active force, and F-15s, F-16s, A-10s, and F/A-18s are being programmed for the reserves. Mission-capable rates are currently at all-time highs for many tactical aircraft.



F-16 WITH AMRAAM AND SIDEWINDER MISSILES

A-10 WITH MAVERICKS

The United States has expanded aircrew training for combat. US Air Force tactical aircrews are receiving nearly 50 percent more flight time than in 1978. Joint and combined exercises are giving crews realistic training against a variety of simulated enemy aircraft and ground-based defenses and increasing their experience in working with other US components and allied forces. Currently, US Air Force, Navy, and Marine Corps active force fighter/attack aircrews fly nearly twice as many hours as do their Warsaw Pact counterparts. Although Soviet aircrews have been constrained in the past by a rigid system of ground control, a more flexible training program is evolving.

Naval Forces

Both the United States and the Soviet Union have vigorous programs to upgrade their fleets. Since 1978, Soviet nuclear-powered attack submarine construction programs have been expanded, and they are expected to continue to grow. The VICTOR III-class, which entered service in 1979, attains submerged speeds of nearly 30 knots. The new ALFA-class has a low magnetic signature, deep-diving capability, and a submerged speed significantly higher than previous Soviet SSNs. An aggressive Soviet noise-reduction program is expected to make Soviet submarines less vulnerable in the future. The OSCAR-class nuclear-powered guided-missile attack submarine (SSGN) carries 24 submerged-launch SS-N-19 antiship cruise missiles with a maximum range of 300 nautical miles.

The nuclear-powered KIROV-class guided-missile cruiser is the largest combatant-class ship built by any country since World War II, except for aircraft carriers. Although increased shipborne air defense capabilities will improve the effectiveness of Soviet surface combatants, the lack of high-performance carrier-borne fighters will continue to be a weakness during operations beyond the range of land-based fighter aircraft. For this reason, the Soviets are expected to construct several conventional takeoff and landing carriers by the early 2000s.

Soviet Naval Aviation will almost certainly continue its commitment to a land-based bomber force through continued acquisition during the 1980s of BACKFIRE and follow-on bombers with increased air-to-surface missile capabilities. With future development of conventional aircraft carriers, SNA could undergo the most marked change of any element of the Soviet Navy in the coming decades.

In response to these trends in Soviet naval programs, the United States has embarked on an important shipbuilding program to insure that maritime superiority can be maintained by the US and its allies in key ocean areas. As Chart IV-14 illustrates, many of these ships are highly capable units that will form the nucleus of a 600-ship force — 15 carrier battle groups; four battleship

FY 1985 SHIPBUILDING PROGRAM

CATEGORY/CLASS	FY85	FY86	FY87	FY88	FY89	TOTAL
	NUMBER OF SHIPS					
BALLISTIC MISSILE SUBMARINES	1	1	1	1	1	5
NUCLEAR POWERED ATTACK SUBMARINES	4	4	4	4	5	21
CRUISERS	3	3	3	2	2	13
DESTROYERS	1	–	3	5	5	14
AMPHIBIOUS SHIPS	2	3	2	3	3	13
MINE WARFARE SHIPS	4	8	5	4	4	25
SUPPORT SHIPS	6	8	4	4	5	27
CRAFT LCAC	9	12	12	12	12	57
NUMBER OF CONVERSIONS/REACTIVATION						
AMPHIBIOUS SLEP	–	–	1	3	3	7
CV SLEP	1	–	1	–	–	2
BATTLESHIP REACTIVATION	1	–	1	–	–	2
SUPPORT SHIPS	3	1	–	1	2	7

AS OF 1 JANUARY 1984

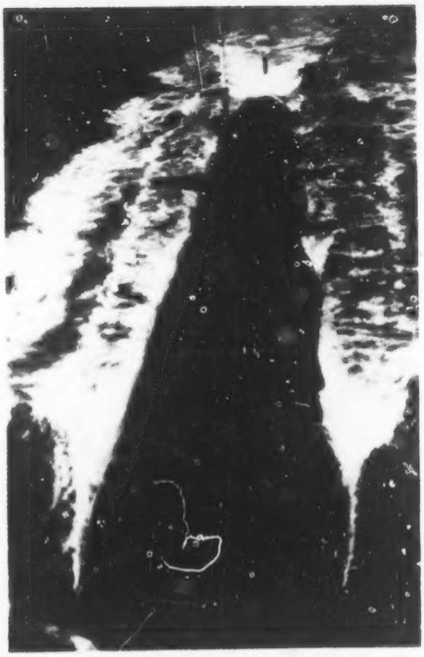
CHART IV-14

surface action groups; 100 nuclear-powered, multimission attack submarines; 10 underway-replenishment groups; and increased amphibious lift.

This modernization program is most dramatically reflected in the evolution of major surface combatants. Construction continues on the THEODORE ROOSEVELT, which will form the nucleus of a fifth nuclear-powered carrier battle group. The battleship NEW JERSEY has rejoined the fleet and is the first US vessel scheduled to deploy the TOMAHAWK long-range cruise missile. The battleships IOWA, MISSOURI, and WISCONSIN will follow, beginning with the IOWA in 1984; each will form the nucleus of a surface action group.

The first of the TICONDEROGA-class guided-missile cruisers (CG-47) has joined the fleet, providing a new dimension in air defense with its AEGIS combat system, phased-array radar, and advanced battle group antiair warfare command and control program. Two more CG-47s are under construction; a total of 27 are planned. The ARLEIGH BURKE-class guided-missile destroyers will complement the CG-47s' capabilities within the battle group. These destroyers will incorporate the AEGIS system, NBC protection, an improved seakeeping hull, medium-range HARPOON antiship cruise missiles, and a vertical launch system which will accommodate a variety of antiair and antisubmarine weapons and long-range TOMAHAWK cruise missiles. Twenty-nine ships of this new class are planned; construction will begin in FY 1985. US amphibious forces will be enhanced and serious shortfalls reduced as new and more capable units replace ships reaching the end of their service lives.

BATTLESHIP NEW JERSEY WITH ESCORT



LOS ANGELES-CLASS ATTACK SUBMARINE

LOS ANGELES-class nuclear attack submarines continue to enter the fleet at a rate of four per year, and many earlier attack submarines will receive TOMAHAWK cruise missiles.

Effective antiair warfare capabilities are necessary to counter improvements in Soviet standoff systems. Programs are under way to upgrade the PHOENIX missile for the F-14 and improve defense in depth with the AEGIS system. A comprehensive maritime antiair warfare investment strategy is required to develop the best systems to counter the standoff threat in the future.

The Soviets continue to expand their capability to mine ports and open-ocean areas, threatening the US Navy's ability to respond rapidly to crises. Current deficiencies will be overcome as new, more effective mine countermeasure platforms enter the fleet.

F-14 WITH SIX PHOENIX MISSILES

Amphibious Forces

The amphibious task forces of the Navy-Marine Corps team are important instruments of deterrence and power projection. The mobility of these forces permits them to concentrate combat power at times and places required and then move on to other tasks. Integral ground and air power provide the capability for forcible entry. These forces can seize and control strategic choke points and lodgments, as well as establish and defend advanced bases essential to the naval campaign.

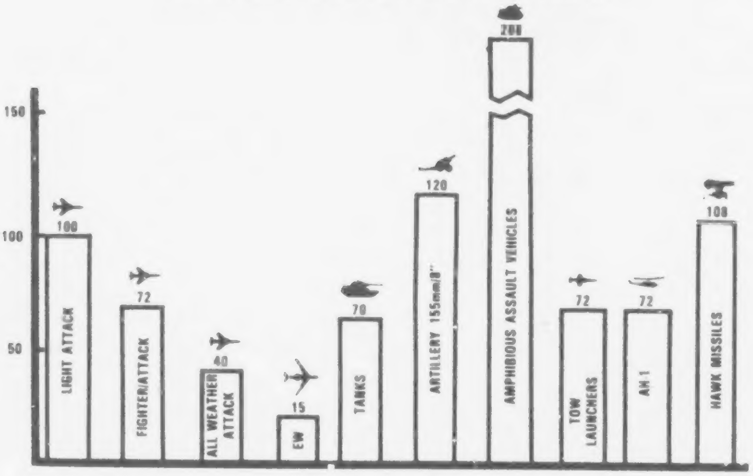
Although Marine Corps forces are structured primarily to conduct amphibious operations, they can respond rapidly by airlift or sealift to a wide variety of contingencies. The MAF is the basic organization considered in strategic planning and is normally made up of one Marine division supported by a Marine aircraft wing and a force service support group. Typical firepower available within a MAF is illustrated in Chart IV-15.

During FY 1985, the Marine Corps will maintain three MAFs within its active structure, one in the western Pacific and one on each coast of the United States. The Marine Corps Reserve's 4th Marine Division/Wing Team will continue to augment the three active MAFs under mobilization conditions.

The Marine Corps is increasing its firepower in both infantry and artillery units and improving its tactical mobility. Unit mortars will be lighter and have a longer range. New towed 155mm howitzers will increase the flexibility, lethality, and range of artillery battalions. The ability of each MAF to conduct counterfire will be greatly improved with the formation of three target-acquisition batteries by FY 1988.

Antiarmor capabilities will be improved by a new ver-

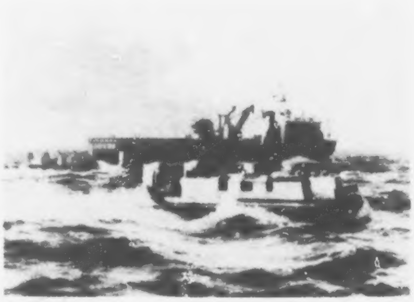
MARINE AMPHIBIOUS FORCE TYPICAL WEAPONS SYSTEMS



AS OF 1 JANUARY 1984 *CHART IV-16*

sion of the current light antitank weapon, addition of antitank teams to infantry battalions, and introduction of a TOW platoon at the regimental level, thus doubling the antiarmor capability of each division.

Several programs will improve ship-to-shore capabilities for amphibious operations and armored mobility ashore. The air-cushion landing craft (LCAC) is a shipborne, high speed (50 knots), ship-to-shore vehicle capable of carrying a 75-ton payload. Introduction of the first of 90 planned LCACs into the fleet is scheduled for 1986. The service life of tracked landing vehicles (LVT) will be extended into the 1990s through major improvements. The Marine Corps has also added mobile firepower to the MAF with the addition of the Light Armored Vehicle (LAV). The first company of LAVs was activated last year; three LAV battalions will be added by 1986.



LCAC AMPHIBIOUS LANDING CRAFT

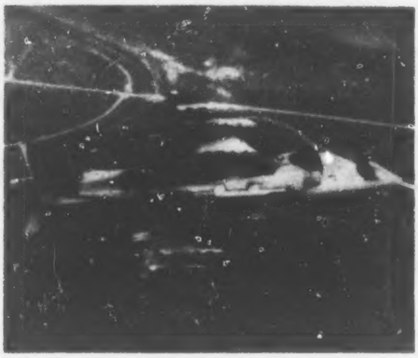
MARINE CORPS MODERNIZATION

SYSTEM	*DESCRIPTION*	*STATUS*
AV-8B	VSTOL LIGHT ATTACK AIRCRAFT	IN PRODUCTION. ENTERING THE FIELD
FA-18	HIGH PERFORMANCE FIGHTER/ATTACK AIRCRAFT	IN PRODUCTION. 3 SQUADRONS UPGRADED, COMPLETION BY FY 1989
LVT	AMPHIBIOUS LANDING VEHICLE, TRACKED	UNDERGOING UPGRADES THAT INCLUDE NEW ENGINE, FUEL TANK, WEAPONS STATION AND SERVICE LIFE EXTENSION
LAV	LIGHT ARMORED VEHICLE	IN PRODUCTION. IN THE FIELD
LCAC	SHIPBORNE, HIGH SPEED, OVER-THE-BEACH, LANDING CRAFT	IN PRODUCTION. ENTERS SERVICE IN FY 1986
JVX	ADVANCED VERTICAL LIFT AIRCRAFT	IN DEVELOPMENT
MOBILE PROTECTED GUN SYSTEM	LIGHTWEIGHT, MOBILE DIRECT FIRE WEAPON SYSTEM	IN DEVELOPMENT

AS OF 1 JANUARY 1984

CHART IV-16

Marine Corps aviation is focusing its modernization efforts on the CH-53E cargo helicopter, F/A-18 strike fighter, and AV-8B VSTOL attack aircraft. The CH-53E, which is currently entering the fleet, is capable of moving over 90 percent of the combat essential equipment of a Marine Corps division. The F/A-18 is a highly maneuverable fighter aircraft which can also deliver air-to-ground ordnance with about four times the accuracy of the aircraft it is replacing, the F-4. The AV-8B will be operational by FY 1985. Plans to modernize the Marine Air Reserve will alleviate aircraft shortages and obsolescence and insure compatibility with the active force.



MARINE CORPS AV-8B

The Joint Advanced Vertical Lift Aircraft Program (JVX) has been established to develop a replacement for Marine Corps medium-lift assault helicopters. Variants of the JVX will be developed for other Service multimission applications. A summary of major Marine Corps systems modernization is provided in Chart IV-16.

Chemical Warfare

Chemical warfare (CW) is an area of continuing concern. As a signatory of the Geneva Protocol of 1925, the United States has a policy of no first use of chemical weapons. The United States desires to go beyond undertakings in the Protocol and ban chemical weapons from the world's arsenals.

CHEMICAL DECONTAMINATION UNIT

Since 1969, the United States has refrained from producing chemical weapons with the hope that the Soviet Union would exercise similar restraint. The Soviet Union, however, has continued to develop its chemical capabilities. The United States has also attempted to negotiate an effective, verifiable, chemical weapons arms control agreement with the Soviet Union, but little progress has been achieved. The Soviet modernization of its CW capabilities has created an imbalance between NATO and the Warsaw Pact, as illustrated in Chart IV-17. The Soviet Union now has 14 chemical agent production facilities; the United States has none. There is also overwhelming evidence that some Soviet lethal chemical agents have been used against the people of Laos, Kampuchea, and Afghanistan.

Although US chemical protection programs have made progress, US forces have not achieved the level of chemical protection required. Individual protective equipment is available to Army, Air Force, and Marine Corps units. Improved detection equipment has been fielded, and further improvements are being sought. Also, a number of promising collective protection systems are currently being evaluated.

Chart IV-18 compares US and Soviet protective capabilities. US forces are clearly behind the Soviets in a variety of chemical protective capabilities. Major US deficiencies exist in protective clothing; collective protection systems for key equipment, facilities, and rest and relief areas; detection and warning devices; monitoring capabilities; decontamination equipment and agents; and the capability to treat large numbers of casualties in a CW environment. Prophylaxis and therapy for all chemical agents need considerable improvement.

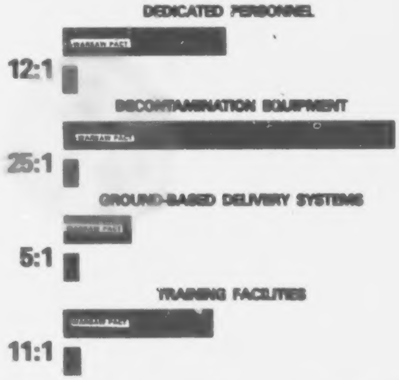
Chemical defense equipment and procedures isolate soldiers from their weapons and severely restrict their combat effectiveness. This degradation would reduce the qualitative advantages of US units. Consequently, a large Soviet chemical attack could render conventional defense ineffective, thus lowering the nuclear threshold. A purely defensive chemical posture is inadequate. The United States must achieve a credible CW retaliatory capability, so that the Soviets will be forced to consider the consequences to their own forces if they initiate the use of CW. Chart IV-19 compares the offensive or retaliatory chemical capabilities of the United States and the USSR.

Most chemical munitions in the US stockpile can no longer be delivered effectively on the battlefield. The most critical deficiency is the lack of a delivery capability against targets beyond artillery range. The United States and its allies are faced with a situation in which the Soviets can attack not only close-in targets, but also airfields, logistic nodes, command and control facilities, and other combat support and supply functions, seriously degrading their operations. Conversely, NATO forces have a very limited capability to impose similar restrictions on the Warsaw Pact.

The United States has been unable to eliminate the Soviet CW threat through unilateral restraint, bilateral negotiations, or broad multinational efforts. To restore a credible CW deterrent, the US needs to improve its retaliatory capabilities sufficiently to deny the Soviets the significant military advantage they would now gain from initiating CW. Only by reestablishing a chemical warfare balance can the United States persuade the Soviets to negotiate a chemical weapons ban seriously.

The United States should continue its modest chemical program in order to fill a serious void and send a clear signal that it will be able to retaliate if attacked. To upgrade its chemical retaliatory capabilities, the United States must: improve the utility of the current stockpile through continued maintenance, planning, and training; reestablish a facility to develop and produce modern chemical weapons; and acquire a longer range chemical capability. In the absence of an effective, verifiable ban on CW, a credible stockpile is essential.

NATO—WARSAW PACT
CHEMICAL WARFARE COMPARISON



AS OF 1 JANUARY 1984 *CHART IV-17*

CHEMICAL WARFARE PROTECTIVE CAPABILITIES US-USSR

	USSR	*US*
• NUMBER OF DEDICATED PERSONNEL	85,000	7,000
• NUMBER OF LARGE, MOBILE, DECON AND RECON DEVICES	20,000+	1,000
• INDIVIDUAL PROTECTION	YES	YES
• COLLECTIVE PROTECTION		
• VEHICLES, SHIPS	YES	FEW
• KEY FACILITIES	YES	FEW
• DETECTION AND WARNING		
• AUTOMATIC ALARMS AND DETECTOR KITS	YES	YES
• RECONNAISSANCE VEHICLES	YES	NO
• EDUCATION AND TRAINING		
• MILITARY CHEMICAL SCHOOLS	4	1
• LENGTH OF LONGEST COURSE	5 YRS	6 MOS
• CONDUCTS CHEMICAL TRAINING	YES	YES
• FIELD TRAINING AREAS	78	0
• FORMAL TRAINING (HRS/YR)	100-400	16-100
• USE OF LIVE AGENTS	YES	NO
• CW DEFENSE EXERCISES	YES	YES

AS OF 1 JANUARY 1984 *CHART IV-18*

CHEMICAL OFFENSIVE/RETALIATORY CAPABILITIES US-USSR

	USSR	*US*
• TYPES OF AGENTS		
• NERVE	4	2
• BLISTER	6	1
• BLOOD	1	0
• INCAPACITANT	PROBABLE	0
• TOXINS	1+	0
• TYPES OF DELIVERY SYSTEMS		
• AERIAL ROCKETS	PROBABLE	NO
• TACTICAL ROCKETS	YES	NO
• BALLISTIC MISSILES	YES	NO
• MULTIPLE ROCKET LAUNCHERS	YES	NO
• ARTILLERY AND MORTARS	YES	YES
• SPRAY TANKS	YES	YES
• BULK FILL TANKS	YES	YES*
• CLUSTER BOMBS	YES	NO
• MINES	YES	YES
• PRODUCTION FACILITIES	MANY	0

* US NON-PERSISTENT NERVE ONLY

AS OF 1 JANUARY 1984 *CHART IV-19*

Special Operations Forces

Because of their unique applications across the conflict spectrum, special operations forces (SOF) are valuable elements available to commanders in the field. The potential benefits of SOF justify the high priority given to the revitalization of their capabilities. SOF are particularly well qualified to counter threats to US interests that result from low-intensity conflict. In this regard, SOF have accounted for one-quarter of the mobile training teams deployed in support of US security assistance programs since 1979.

MC-130 COMBAT TALON

Special operations forces are also capable of direct action in response to crises for which the use of other US forces might be inappropriate. Such crises might include threats of hostile acts against US citizens or facilities abroad by terrorists, dissidents, foreign governments, or other sources. SOF are especially useful in resolving crises and terminating conflicts that are still at relatively low levels of violence and to which the nations involved have not made major resource commitments.

Special operations forces must also be capable of supporting conventional forces in the event of large-scale Soviet aggression against the United States and its allies. To this end, SOF can provide invaluable intelligence to conventional field commanders and may conduct psychological, civil affairs, and unconventional warfare operations. Unconventional warfare missions would include the interrelated fields of guerrilla warfare, direct action, and evasion and escape operations.

Accelerated action is under way to improve SOF capabilities to meet national and theater requirements in peace, crisis, and war. Chart IV-20 identifies US SOF and summarizes initiatives which have been taken to re-

SPECIAL OPERATIONS FORCES

SERVICE	*CURRENT FORCES (ACTIVE & RESERVE)*	*INITIATIVES*
ARMY	• 1 SPECIAL OPERATIONS COMMAND 7 SF GROUPS 21 SF BNs 4 PSYOP GROUPS 12 PSYOP BNs	• ADDITIONAL SPECIAL FORCES GROUP • INCREASES IN SPECIAL FORCES, PSYOP PERSONNEL, HELO AND STAFF SUPPORT
	• 2 RANGER BNs	
	• CIVIL AFFAIRS BN	• EQUIPMENT IMPROVEMENTS
NAVY	• 2 NAVSPECWAR GROUPS 3 NAVSPECWAR UNITS 2 SDV TEAMS 5 SEAL TEAMS (41 PLTS) 2 SPECIAL BOAT SQDNs 6 SPECIAL BOAT UNITS	• 2 NEW SEAL TEAMS • PROCUREMENT OF SPECIALIZED EQUIPMENT • CONSTRUCTION OF SPECIAL FACILITIES AND MULTI-MISSION PATROL BOAT
AIR FORCE	• 1 SPECIAL OPERATIONS WING 5 SQDNs	• ADDITIONAL COMBAT TALON (MC-130) AND HH-60D AIRCRAFT
	• 2 RESERVE SPECIAL OPERATIONS GROUPS 3 SQDNs	• SERVICE LIFE EXTENSIONS OF CURRENT AIRCRAFT
	• 1 HELICOPTER DET	• NAVIGATION AND SPECIAL AVIONICS UPGRADES

AS OF 1 JANUARY 1984

CHART IV-20

vitalize these forces. Improvements are being made in SOF training, particularly in language skills and area orientation, and research and development is being increased.

SOF TRAINING

On 1 January 1984, the Joint Chiefs of Staff established the Joint Special Operations Agency (JSOA) to improve management and increase the responsiveness of these forces to the requirements of the deployed commands. The JSOA will provide a mechanism to improve cross-Service research and development, joint training and doctrine, and strategic planning.

Although the enhancements described above represent a considerable improvement in existing capabilities, a number of requirements remain unsatisfied. These needs will continue to receive priority attention.

EMPLOYING AND SUPPORTING THE FORCES

Readiness

Status and Trends

The readiness of forces to perform their missions depends on the personnel and materiel resources assigned to units and on how well those resources are trained and maintained. The men and women of today's armed forces are better led, equipped, and prepared than ever before. Readiness postures have improved as a result of successful recruiting and retention initiatives, the acquisition of larger quantities of modern equipment, and high esprit de corps among servicemembers. Over the past three years, the Services have placed higher priority on improving readiness and operational capabilities than expanding force structure. Although substantial progress has been made in overcoming readiness deficiencies, sustained funding is still essential to maintain the momentum.

Recent budget initiatives have favorably influenced the personnel and equipment posture of the armed forces and provided the impetus for restoring US conventional force strength. Many programs are just beginning to show positive effects on the operating forces; the full benefit of these efforts will be realized over the next few years. Notwithstanding gains made by the Services, shortfalls in authorized end-strength, senior-grade enlisted personnel, spare parts, munitions, training funds, chemical defense, survivable C^3 systems, and intelligence-support capabilities continue to inhibit readiness.

Reserve Force Contributions to Readiness

Reserve forces, which constitute approximately 45 percent of the total force structure, play a key role in the implementation of US military strategy. One-third of the Army's combat divisions are in the National Guard. Half of the nation's strategic airlift aircrews, 90 percent of the Military Airlift Command's (MAC) aeromedical evacuation aircrews, and two-thirds of the air defense interceptor capability for the continental United States (CONUS) are Air Reserve forces. The Naval Reserve provides all the Navy's logistical airlift in CONUS and one-third of the total naval intelligence assets, and the Marine Corps Reserve provides an additional Division/Wing team.

AIR NATIONAL GUARD INTERCEPTORS

Reserve forces play an important role in day-to-day operations. Within the last year, Army reserve component units participated in 13 major international training exercises involving over 20,000 members of the National Guard and Army Reserve. Approximately 30 percent of Naval Air Reserve Force flight time supports missions of the active fleet. During the last fiscal year, this support included 10,000 flight hours of maritime patrol, 25,000 hours of fleet logistic support, and deployments to the western Pacific and Europe. Air Reserve Force tankers provide continuing support to the Strategic Air Command European Tanker Task Force, and approximately 20 percent of the C-5, C-141, and KC-10 missions are flown by Air Force Reserve crews. US Marine Corps Reserve personnel augmented exercises in Korea and Europe, and a CH-53 helicopter squadron deployed to Norway during the combined exercise COLD WEATHER.

EXERCISE REFORGER-83

Training and Exercises

Realistic and challenging training is essential to the development and maintenance of US capabilities. Facilities such as the Army's National Training Center, the Marine Corps' Air-Ground Combat Center, and the Air Force's Nellis range complex provide environments in which units can experience rigorous wartime conditions against realistic adversaries. Data gathered at these and similar facilities allow the Services to improve doctrine, tactics, training methods, and unit operating procedures. Range modernization, acquisition of training simulators and devices, and the increased use of technology are helping to provide more effective, realistic training. Comparative training projects with our NATO allies provide economies of scale and enhance standardization of tactics and procedures.

TEAM SPIRIT

As an important extension of Service training, the JCS-directed and coordinated exercise program provides opportunities to evaluate joint doctrine; tactics, techniques, and procedures; and command and control capabilities — knowledge essential to insure the readiness of US forces to support the unified and specified commands. This program, which includes approximately 60 directed and coordinated exercises per year, takes place throughout the world. Additionally, combined exercises with allies provide the necessary interaction to test and evaluate combined systems, lines of communication, and agreements.

In addition to supporting general training objectives, joint exercises demonstrate US resolve and the capability to project a military presence in support of national interests and commitments. The BRIGHT STAR series of exercises conducted in the Middle East demonstrates the US capability to project military forces into that region should the need arise. Similarly, intensified joint and combined exercises have been conducted with friends and allies in the Central American-Caribbean region. The annual REFORGER/CRESTED CAP exercises for the reinforcement of NATO, and TEAM SPIRIT, which takes place in Korea (Map IV-8), continue to demonstrate resolve and support for US allies in those regions.

Mobility

The ability of the United States to deter aggression, limit conflict, and defend its interests depends on the capability to deploy forces rapidly and sustain them. Mobility forces using air, sea, and land resources must be able to deliver forces where they are needed in time to make a difference. Intertheater airlift will generally transport deploying forces during the early days of a crisis until sealift begins to arrive. These movements will include personnel and equipment supported by prepositioned stocks. Sealift delivers follow-on forces and provides the sustaining power for the deployed forces. Land mobility forces provide needed offload and onward movement capability.

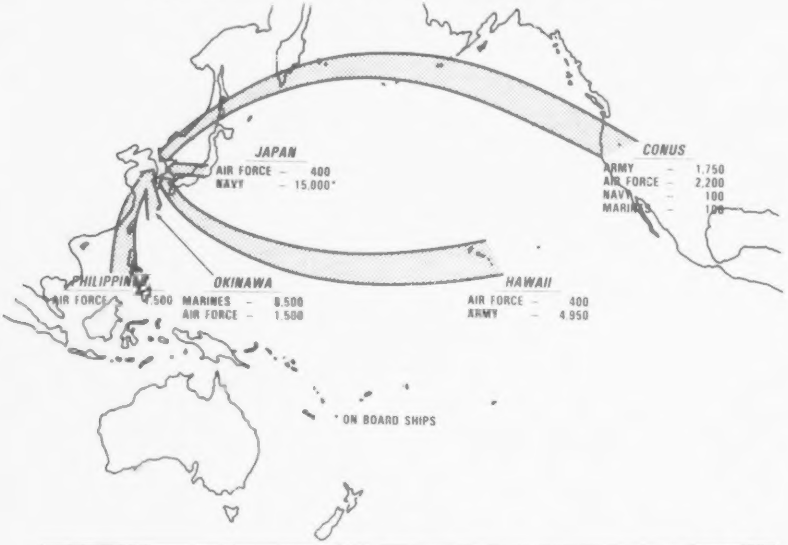
Airlift

Airlift is essential to the rapid deployment of US forces. To assure the readiness and sustainability of the airlift fleet, the Air Force has programmed improvements in wartime aircraft utilization rates, increases in the service lives of existing aircraft, enhancements to the Civil Reserve Air Fleet (CRAF), and increases in intertheater and intratheater organic airlift. A summary of airlift forces is presented in Chart IV-21.

The Military Airlift Command has been unable to attain high, sustained aircraft utilization rates to support wartime planning because of shortages in many areas. Improvements continue, however, as funds are provided for aircraft spares and aerial port equipment. Other airlift initiatives include wing modifications on C-5As and C-130B/Es, which will extend the service life of these important airframes. In addition, C-130A/D wing repairs will allow operation through the end of their programmed lives.

Efforts are under way to enhance the capability of the CRAF, which provides additional intertheater airlift for national emergencies. Nearly 95 percent of the airlifted troops and over 30 percent of the airlifted cargo would be transported on CRAF aircraft. The CRAF Enhancement Program is designed to supply additional bulk and oversize cargo capacity for emergency use by incorporating convertible cargo-handling features (cargo door, stronger floor, and floor roller system) in long-range, wide-body civil passenger aircraft. The first aircraft modified under this program, a new cargo-convertible

DEPLOYMENTS FOR EXERCISE TEAM SPIRIT 83



AS OF 1 JANUARY 1984

MAP IV-8

AIRLIFT FORCES

CRAF

TYPE	NUMBER**
DOMESTIC	35
ALASKAN	10
SHORT-RANGE INTERNATIONAL	20
LONG-RANGE INTERNATIONAL (PASSENGERS)	212
LONG-RANGE INTERNATIONAL (CARGO)	100

MAC

TYPE	NUMBER (ACTIVE/RESERVE)
C-5	70/0*
C-141	234/0*
C-130	210/302

* C-5 AND C-141 AIRCRAFT ARE JOINTLY OPERATED BY ACTIVE AND ASSOCIATE RESERVE UNITS.

** THE CRAF CONSISTS OF THREE STAGES. NUMBERS SHOWN ARE CRAF STAGE III.

CHART IV-21

AS OF 1 JANUARY 1984

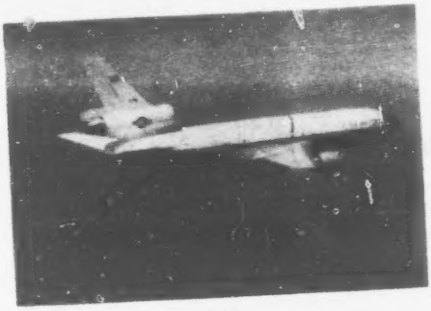
DC-10, was delivered in 1982. The program is now focusing on retrofits of 19 existing B-747 commercial passenger aircraft, which will provide 2.9 million ton-miles per day of cargo airlift.

CRAF B-747 LOADING
MILITARY CARGO

Current intertheater programs also include the acquisition of 50 new C-5Bs, 44 additional KC-10s, and research and development on the C-17. These programs will increase the FY 1984 airlift capability of about 32 million ton-miles per day to 50 by the end of FY 1989.

Despite the above programs, there will continue to be shortfalls in the achievement of the intertheater minimum objective as well as deficiencies in intratheater airlift capacity. As the airlift fleet continues to age, modernization will become a major concern.

The C-17 is programmed to meet the remaining airlift shortfall. Full-scale development of this aircraft begins in FY 1985. The C-17 will provide increased intertheater and intratheater capability to deliver troops and cargo to field commanders, and an outsize airdrop/low-altitude parachute-extraction capability. The air-refuelable C-17 has excellent ramp maneuverability and takeoff-and-landing profiles designed to allow routine operations from small, austere airfields. These features will provide considerable operational flexibility to theater commanders. The C-17 will offset capabilities lost from the retirement of older C-130s and will replace the C-141B as that aircraft reaches the end of its useful service life.



KC-10

Sealift

In any major overseas deployment, sealift will deliver about 95 percent of all dry cargo and more than 90 percent of all petroleum products. Ships from the US Merchant Marine represent the largest domestic source of sealift, making them an important strategic resource. In addition, US allies will provide 400 ships for the rapid reinforcement of NATO and 20 ships for reinforcement of the Republic of Korea. Sealift forces suitable for military planning are listed in Chart IV-22.

LOADING ARMOR ON SEALIFT

US sealift assets available for initial deployment requirements continue to decline, even though the numbers of dry-cargo vessels available from the National Defense Reserve Fleet (NDRF) and Military Sealift Command's peacetime controlled fleet have remained constant, and the number of Ready Reserve Fleet (RRF) vessels is increasing. The problem is the decline of the US-flag merchant marine. Over the past 30 years, the number of militarily useful dry-cargo vessels available for contingency planning has decreased from 2,400 to about 440. Not only is the number of available ships declining, but those that remain are not necessarily the most suitable for military purposes. The trend toward containerships and away from breakbulk ships poses increasing readiness problems, particularly for initial deployment requirements. Containerships are more suited for resupply than deployment, since less than 25 percent of military unit equipment can be containerized. The most useful ships for military deployment are breakbulk, roll-on/roll-off, and barge carriers. Only a modest number of the latter two types are in the fleet today, and no significant increases are anticipated.

Ships in the NDRF are a valuable but aging asset, with only a limited capability to satisfy deployment requirements. Presently, 216 ships are in the NDRF, many

SEALIFT FORCES MILITARILY SUITABLE

	DRY CARGO	TANKERS
MSC CONTROLLED FLEET	30	28
U.S. MERCHANT MARINE	200	144
READY RESERVE FORCE	31	1
NATIONAL DEFENSE RESERVE FLEET*	186	30
EFFECTIVE US CONTROL (EUSC)	20	53
NATO POOL**	400	0

* ALSO INCLUDES 18 PASSENGER SHIPS AND 10 LANDING SHIPS TANK.

** 400 OUT OF A POOL OF OVER 600 COULD BE MADE AVAILABLE FOR NATO REINFORCEMENT.

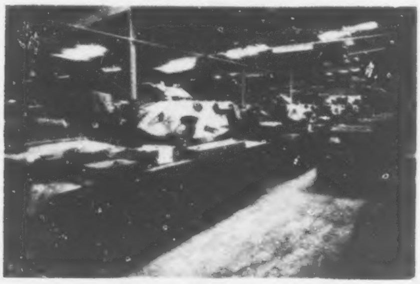
AS OF 30 SEPTEMBER 1983

CHART IV-22

of World World II vintage. The RRF, an upgraded segment of the NDRF, is more useful. Thirty-two newer ships are being held in advanced readiness to load in 10 days or less, and a program is under way to increase this number to 61 dry-cargo vessels and 16 tankers.

Efforts are under way to improve the sealift posture and provide a more rapid deployment capability. The Navy is converting four SL-7 class containerships to a more useful roll-on/roll-off configuration. Upon completion of the conversion, the ships will be placed in the RRF, and the remaining four SL-7s will be converted. The Navy also has a program that will allow containerships to carry unit equipment. There is a significant shortage in the sealift required to deliver the fuel necessary to sustain deployment of US forces. The Navy plans to procure 16 tankers for the RRF to offset predicted shortfalls in petroleum resupply.

To obtain the maximum benefit from sealift, US forces must be able to unload and distribute cargo rapidly from ships in all theaters of operations. In the central European theater, there are adequate modern ports, road and rail networks, and host nation support available for the reception of deploying US forces. Seaports in northern and southern Europe, however, lack the capacity found in central Europe. In Southwest Asia, there is less cargo unloading and throughput capacity than required for reception and deployment. US forces are also hampered by shortages in the specialized equipment and personnel required to support operations in austere ports or where over-the-shore delivery would be needed. These deficiencies will be reduced by the Army's logistics-over-the-shore program, which has been designed to meet anticipated Southwest Asia cargo-offload requirements. The Army and the Navy are working together under the cargo offload and discharge systems initiative to coordinate Service programs and address force structure requirements.



POMCUS WAREHOUSE

Pre-Positioning

To overcome limitations of airlift and sealift, US programs for pre-positioning petroleum, water, supplies, equipment, and ammunition are in progress in various regions of the world. Pre-positioning reduces rapid-deployment cargo requirements by permitting essential materials to be located where US forces would most likely be required. Under the POMCUS program (pre-positioning of materiel configured to unit sets), equipment is being pre-positioned in Europe for four Army divisions, later increasing to six, and numerous nondivisional support units. Equipment and supplies have also been pre-positioned aboard 17 Near-Term Pre-Positioning Force (NTPF) ships in the Indian Ocean. The 13 ship Maritime Pre-Positioning Ship (MPS) program becomes operational in FY 1984 with the fielding of the first of three programmed pre-positioned sets of equipment, and by 1986 the MPS will replace ships of the NTPF that now provide Marine Corps pre-positioning support. The MPS program will facilitate the rapid deployment of Marine air-ground task forces.

NTPF SHIP IN THE INDIAN OCEAN

Deployment Management

The Joint Deployment System (JDS), established to improve deployment management, should reach full operational capability in 1985. The JDS is designed to link lift users with command authorities and transportation operating agencies. This system will provide the NCA and JCS an increased ability to make changes in force allocations, schedules of lift requirements, and planned force deployments.

Sustainability

Sustainability gives military forces staying power once they are deployed in peacetime or in combat. Materiel sustainability consists of several interdependent elements, including theater pre-positioning programs, CONUS depot stocks, host nation support, and the industrial production base. Service programs continue to improve sustainability. However, it is important to note that the pre-positioning objectives stated represent only those minimum quantities needed to sustain combat forces until sea lines of communication from CONUS can be securely established. Extensive additional CONUS stockpiles are needed to bridge the gap between the depletion of theater assets and full wartime industrial mobilization.

Ammunition

Ammunition shortfalls are the most critical problem in materiel sustainability. Commanders continually identify inadequate ammunition resources as a major constraint on their combat capabilities. This constraint is particularly characteristic of the more modern munitions which provide increased firepower with reduced delivery system vulnerability, but at a unit cost that prohibits large inventories. The Services continue to fund increases in war reserve ammunition stockpiles and inventories. Programs must be pursued which balance the need for increased pre-positioned and CONUS stockpiles with industrial base enhancements that support a self-sustaining ammunition structure. The US should continue to encourage its allies to produce greater quantities of compatible munitions to interface with and supplement US pre-positioned stocks.

Petroleum, Oils, and Lubricants

The major cause of the pre-positioned war reserve materiel requirement shortfalls in petroleum, oils, and lubricants (POL) has been the lack of theater storage facilities due to poor geography, inadequate funding, and lack of host-nation agreements. The US and its NATO allies need to fund NATO infrastructure POL facilities. The US also should continue to seek favorable host-country agreements elsewhere.

Military Construction

There is a widening gap between the availability of funds and the ability of NATO to meet its infrastructure requirements. Within NATO Europe, the delay in funding aircraft facility conversions jeopardizes deployment and support of US tactical aviation. Selected US prefinancing of construction projects is essential until infrastructure funding becomes available. In Southwest Asia, construction projects completed in 1983 have improved the ability of the United States to deploy and sustain forces. Runway improvements and the construction of logistical support facilities have enhanced support for tactical air staging operations in the region. Other improvements have also been made in POL storage, refueling, and harbor facilities. In the Pacific, US military construction and host-nation-funded construction projects will improve POL, ammunition, and medical storage capabilities.

Medical

Medical support for US forces is inadequate to meet all contingencies simultaneously. This shortfall stems from insufficient numbers of pre-positioned and deployable hospitals. Ongoing programs will provide funding for an additional 15,680 beds in FY 1985 and 17,180 in FY 1986. Because of two-to-three year leadtimes, programmed additional assets will not be available until the 1987-1989 timeframe. Continued funding of medical programs is essential to insure an acceptable level of medical care and rapid reconstitution of forces.

TRANSPORTABLE SELF-CONTAINED
MEDICAL UNIT

Intelligence

Access to accurate and timely information and warning of possible attack are essential to the NCA, JCS, and military commanders. The role of defense intelligence is to provide decisionmakers with accurate assessments of enemy forces, capabilities, and probable courses of action.

The US reconnaissance program provides capabilities to meet peacetime and wartime information collection requirements. Reconnaissance resources consist of strategic and tactical standoff and penetration systems. These systems provide a variety of intelligence data which might otherwise be denied to operating forces. Current emphasis is directed toward improving the capability to support operational forces during crises and wartime.

Strategic airborne systems include U-2R, SR-71, and RC-135 aircraft, which carry a variety of sensors. Tactical aircraft standoff systems include Air Force RF-4s, TR-1s, C-130s, C-141s, and RC-135s; Navy and Marine Corps RF-4s, F-14 TARPS, EP-3s, and EA-3Bs; and

Army OV-1s and RV-1Ds. Planned improvements include additional TR-1 aircraft, RF-4C enhancements, and installation of the Advanced Synthetic Aperture Radar in the TR-1 aircraft. The P-3 aircraft provides primary ocean surveillance for both surface and subsurface targets. Acoustic ocean surveillance of submarine activity is provided by the Sound Underwater Surveillance System.

TR-1

Peacetime requirements and the nature of modern warfare place an increasing demand on the capabilities of US intelligence systems. The fusion of information from national and tactical intelligence systems is needed to enable commanders to exploit available warning and better manage the battle.

The collection, processing, and dissemination of tactical intelligence will benefit from developments such as new or improved sensors and related processors, e.g., the Air Force's Precision Location Strike System (PLSS) and the Army-Air Force Joint Surveillance and Target Attack Radar System (JSTARS) and advanced high capacity data links. All-source fusion centers are also under development. The Army-Air Force Joint Tactical Fusion program, for example, will eventually provide tactical commanders with the means to assimilate information quickly from national and tactical sensor systems. The Commanders' Tactical Terminal, now under development, and the Navy's Integrated Tactical Surveillance System will greatly facilitate dissemination of signals intelligence data to tactical commanders.

Command and Control

Effective command and control is integral to the employment of military forces. Command and control systems include facilities, equipment, people, communications equipment, procedures, and reporting systems, all of which must be considered simultaneously. The improvement of wartime survivability and the integration of the unified and specified commands into the planning and programming process for command and control systems are essential. In 1983, the establishment of a Joint Tactical Command, Control, and Communications Agency was approved to insure compatibility and interoperability of tactical systems for joint and combined operations through the development and maintenance of a systems architecture.

Improvements in secure, interoperable, and survivable command and control capabilities for tactical forces have traditionally lagged those provided strategic forces. Modernization programs such as the Joint Tactical Communications Program and the Ground Mobile Forces Satellite Communications Program, currently in production, will provide significant improvements in digital communications for tactical units. In addition, improved capabilities for communications in hostile jamming environments are increasing the survivability of theater command and control systems. The establishment of a tri-Service high-frequency antijam interoperability standard and the Single Channel Ground-Airborne Radio System (SINCGARS) are two examples of programs which provide significant improvements. Other jam-resistant communication programs are also being pursued.

E-2C COMMAND AND CONTROL AIRCRAFT

The Position Location Reporting System, a joint Army-Marine command and control program, is in production and will enhance the tactical commanders' ability to locate and identify deployed friendly forces. Complementing that capability, JSTARS will provide great improvement in the target acquisition and weapons placement role of command and control.

Effective defense-wide communications systems are essential for the command and control of strategic and tactical forces, as well as their logistical, intelligence, navigation/position, and meteorological support. The Defense Communications System (DCS) provides US military forces with worldwide, long-haul, common-user voice, data, and teletype services through composite networks of US owned and commercially leased facilities. The worldwide conversion from analog to digital transmission will result in improved reliability, quality, and security. In response to increased requirements, the DCS subsystems will undergo changes that will enhance survivability, expand transmission security, improve interoperability, and increase flexibility.

A worldwide digital system architecture is being developed which will provide guidelines for increasing the survivability and interoperability of DOD telecommunications systems. This architecture will have interconnected voice and data networks, enhanced secure-voice survivability, and expanded use of satellite data. The implications of each of these features for current DOD systems and programs are being explored, and a strategy is being developed for the incorporation of the features into ongoing programs.

The Worldwide Military Command and Control System (WWMCCS) Information System is being modernized to provide significant improvements in the system's automatic data processing reliability, connectivity, and responsiveness. The goal of this modernization is to provide timely, reliable, and responsive command and control information to the NCA.

The Joint Operation Planning and Execution System

The Joint Operation Planning and Execution System (JOPES) provides a foundation for the US conventional command and control system. JOPES will support readiness monitoring and planning and execution of mobilization, deployment, employment, and sustainment activities in peace, crisis, or war. It will provide for close coordination among DOD and other Federal agencies and provide useful tools to support commanders and staffs. JOPES will be phased into operation over the next several years using the expanded capabilities of the WWMCCS Information System and other related programs.

C³ Countermeasures and Electronic Warfare

The United States has formulated a command, control, and communications countermeasures (C³CM) strategy aimed at reducing the effectiveness of Soviet forces by attacking command and control structures, while concurrently protecting and enhancing friendly command and control capabilities. This strategy relies on effective employment of offensive and defensive electronic warfare (EW) at every level of the command, control, communications, and intelligence architecture of military forces. EW capabilities must be maintained throughout the electromagnetic spectrum, with emphasis on millimeter wave, visual, and electro-optics.

EF-III ELECTRONIC WARFARE AIRCRAFT

In parallel, the United States has implemented a program to destroy or disrupt the enemy integrated air defense system, including acquisition radars, target-tracking radars for SAMs and antiaircraft artillery, and ground-based jamming systems. By using a combination of aircraft, drones, and missiles, the Services have improved means for destroying Soviet threat systems. Air Force programs include the F-4G WILD WEASEL and the PAVE TIGER mini-drone. Joint and cross-Service programs include the Navy-Air Force High Speed Antiradiation Missile (HARM) and the SIDEARM I self-protect antiradiation missile.

The effective suppression of enemy air defenses requires timely intelligence on enemy radar and communications networks. Technical information must be programmed into EW systems to provide threat warning or to counter and deceive enemy systems. Service efforts must be integrated fully. Joint and cross-Service programs include the ALQ-99 Navy-Air Force reprogrammable jammer, Navy-Air Force integrated EW system, Army-Marine Corps expendable jammers, and Navy-Air Force Airborne Self-Protect Jammer.

The Joint Electronic Warfare Center (JEWC) is assisting in EW application by compiling information on lessons learned from US exercises and actual past conflicts. The

JEWC is also identifying requirements for data necessary to support EW equipment.

Joint Perspective

Role of the Commanders in Chief

Over the years, a joint system independent of the Services evolved to command US military forces. Commanders in Chief (CINCs) command all forces assigned to them and have regionally or functionally oriented responsibilities for the direction of forces in the field in peace or war. CINCs also provide a direct interface with allied and friendly military forces. Map IV-9 identifies the unified and specified commands and their primary areas of responsibility.

Unified commands are composed of major forces from two or more Services. From the first unified commands in 1947 to the latest, US Central Command, their purposes continue to be to plan and, when necessary, execute military operations in support of US national security objectives. A specified command is one which has a broad continuing functional mission and is usually composed of forces from one Service. The Services are charged with providing forces to the CINCs and supporting those forces.

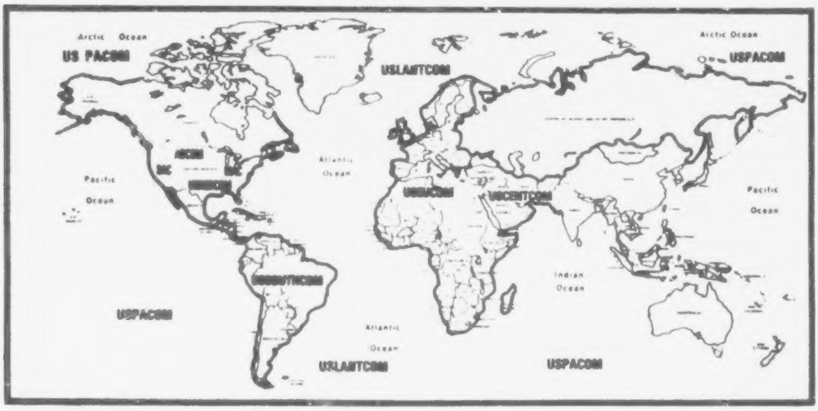
Joint Doctrine

Joint doctrine — official guidance on how best to employ multi-Service forces for specific objectives — has always been a concern and responsibility of the JCS. To insure that US forces have the best available joint approach to the performance of their missions, the JCS have established a program to develop and improve joint doctrine.

A pilot program for decentralized development of joint doctrine has been initiated to evaluate the practicality of assigning to the CINCs the lead responsibility for developing joint doctrine. In a related area, the Commander in Chief, US Readiness Command, has been assigned responsibility for developing joint tactics, techniques, and procedures (JTTP) for interdiction. The JCS believe that the JTTP should be developed in parallel with the acquisition of related weapon systems so that JTTP and systems are available simultaneously to operating forces.

The concept of the airland battle is a specific example of the importance of the joint approach to warfighting. This concept calls for air and ground forces to fight in close coordination in order to defeat enemy forces. The continuous broadening and refinement of joint doctrine are essential to a strong military posture.

COMMANDERS' AREAS OF RESPONSIBILITY*



*AS OF 1 JANUARY 1984

MAP IV-9

CHAPTER V. AREAS OF SPECIAL INTEREST

INTRODUCTION

Broad US security requirements and assessments of major military forces were presented in the preceding chapters. This chapter outlines the status of arms control negotiations, space activities, security assistance, and defense manpower — subjects of special importance to the US military posture. Additionally, the chapter discusses international terrorism, peacekeeping operations in the Middle East, humanitarian assistance, and operations in Grenada.

ARMS REDUCTION TALKS AND CURRENT NEGOTIATIONS

The United States participates in multilateral and bilateral negotiations on arms control and disarmament matters to protect US and allied security interests, build global stability, and promote favorable international relationships. These negotiations are an integral part of the US national security strategy. Arms control and other related negotiations are also being pursued with the idea that equitable and verifiable agreements can contribute to security at reduced force levels. Arms control should not be viewed as a substitute for force modernization; rather, arms control and other defense efforts should be mutually reinforcing.

Any agreement is only as good as the willingness of the signatories to comply with the obligations assumed. The Soviet violation or probable violation of provisions of several agreements presently in force, to which the sides have committed themselves shows a disturbing pattern of Soviet behavior. This behavior must be taken into account in the development of US defense programs and approaches to arms control.

Strategic Arms Reduction Talks

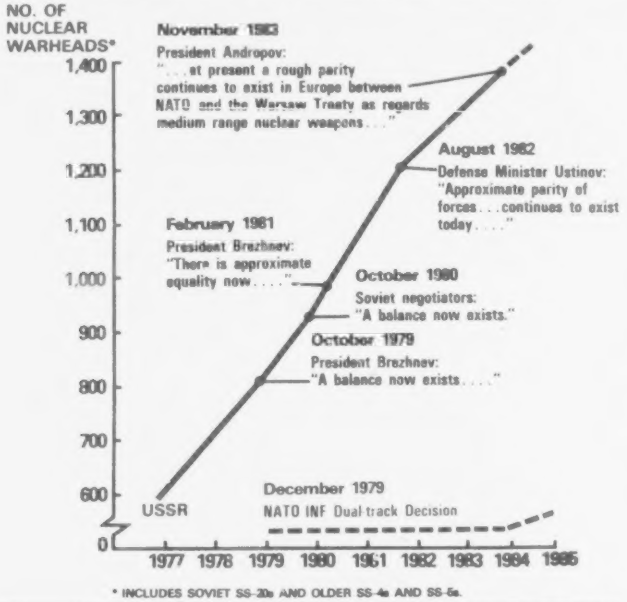
The United States and the Soviet Union began the Strategic Arms Reduction Talks (START) in 1982. Throughout the negotiations, the primary objective of the United States has been to achieve a stable balance at reduced levels of nuclear forces. The US approach to START recognizes the need to redress the strategic imbalance through force modernization and equitable, verifiable arms reductions. The United States is most concerned about reducing the levels of the most destabilizing missile systems, particularly MIRVed ICBMs, but it is also prepared to negotiate limits on bombers and air-launched cruise missiles. To achieve this reduction, the United States introduced a build-down concept which provides a mutual, guaranteed reduction in nuclear systems. This US proposal includes provisions for a build-down of ballistic missile warheads and heavy bombers. The JCS Representative and his advisors are active participants in START. Round V of these talks adjourned with the Soviets refusing to set a resumption date.

Intermediate-Range Nuclear Forces Negotiations

The United States has been conducting INF negotiations in fulfillment of NATO's decision to pursue a dual-track policy of force modernization and negotiated arms reductions. Toward this end, the United States, in close consultation with its allies, has tabled two draft treaty texts in Geneva. The first, the Zero-Zero Treaty, proposes elimination of all Soviet SS-4, SS-5, and SS-20 missiles in return for nondeployment of the US PERSHING II and ground-launched cruise missiles. Following the Soviet refusal to consider the Zero-Zero Treaty, the United States tabled an Interim Proposal Treaty calling for equal levels of warheads deployed on US and Soviet LRINF missiles. In doing so, the United States made clear that its earlier proposal also remained on the table and was the preferred outcome of the negotiations. In September 1983, the United States stated that it would consider a commitment not to offset the Soviet global LRINF missile deployments by US deployment of LRINF missiles in Europe. The United States also agreed to consider apportioning reductions between the PERSHING II and GLCM in an appropriate manner.

Despite these US efforts to promote progress, the USSR left the INF talks in late November 1983. This walkout culminated some four years of Soviet attempts to split the NATO Alliance and disrupt plans for LRINF missile deployments. Throughout the entire period of INF negotiations the Soviets sought energetically to prevent PERSHING II and GLCM deployments while they continued to deploy their own SS-20 missiles (Chart V-1). The United States and its allies have made clear the continued US willingness to resume talks.

LONGER-RANGE INF MISSILE WARHEADS



* INCLUDES SOVIET SS-20s AND OLDER SS-4s AND SS-5s.

AS OF 1 JANUARY 1984 *CHART V-1*

Conference on Security and Cooperation in Europe

The Second Review Conference of the Conference on Security and Cooperation in Europe concluded in late 1983. After almost three years of negotiations, the thirty-five participating states reached consensus on a final document which provides for conferences on human rights, human contacts, cultural exchanges, and security, to be held prior to the next review conference. The Conference on Confidence and Security Building Measures and Disarmament in Europe (CDE) began security discussions on January 17, 1984. This conference will focus on the formulation of confidence and security building measures in Europe that will reduce the risk of surprise attack or miscalculation leading to conflict.

Mutual and Balanced Force Reductions

The long-standing negotiations on Mutual and Balanced Force Reductions (MBFR) between NATO and the Warsaw Pact have the objective of achieving manpower parity between East and West in the NATO Central Region, a goal that is to be achieved with undiminished security for these alliances. Draft treaties have been tabled by both sides, but they remain far apart on two fundamental issues: initial force levels and verification of manpower. Eastern intransigence regarding the need for agreement on initial force levels has called into question the likelihood that reductions will result in parity. The United States and its allies are prepared to resume MBFR discussions at an early date. Despite initial Soviet reluctance to set a date, there are indications that the talks will resume in 1984.

Other Multilateral Negotiations

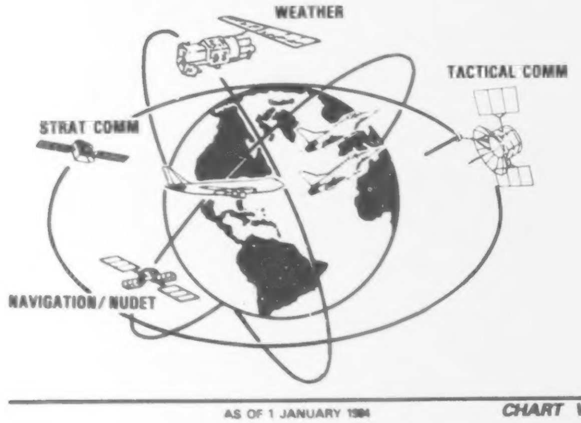
The Joint Chiefs of Staff participated in other multilateral forums, including the recently concluded Third United Nations Conference on the Law of the Sea and arms control and disarmament bodies sponsored by the United Nations. Throughout the Law of the Sea negotiations, DOD reiterated its interest in preserving US navigational and overflight freedoms, including the right of unimpeded transit through international straits overlapped by territorial seas and archipelagic waters. Although the treaty adopted by the conference is unacceptable to the United States because of its deep-seabed mining provisions, the navigation and overflight articles codify customary international law and serve the interests of all states. US maritime operations will be consistent with the US interpretation of the treaty provisions on navigation and overflight.

The most prominent multilateral arms control and disarmament forum is the 40-nation Conference on Disarmament (CD). The achievement of a comprehensive nuclear test ban (CTB) and a chemical weapons prohibition are high on the list of CD priorities. As a result of the suspension of negotiations among the United States, United Kingdom, and Soviet Union on a comprehensive nuclear test ban, some members favor negotiating a comprehensive nuclear test ban within the Conference on Disarmament. Also, interest in a chemical warfare prohibition has intensified since US-USSR bilateral negotiations lapsed in 1980 because of Soviet intransigence over verification issues. Soviet and surrogate violations of the Geneva Protocol of 1925 and the Biological and Toxic Weapons Convention of 1972 have heightened US verification concerns. However, the Soviets have continued to maintain that primary reliance upon national technical means and self-inspection would be sufficient. An unverifiable chemical warfare ban would endanger US and allied security. Therefore, an effective chemical warfare deterrent must be reestablished and maintained until a verifiable treaty can be concluded.

SPACE

In recognition of the increasing role of space in supporting national interests, the United States has developed a comprehensive space policy for both civil and military uses. Space-based systems have clearly demonstrated their ability to support the planning and execution of US military operations, thereby contributing to US deterrent and defense capabilities. Chart V-2 depicts some of the military uses of space. In some cases, space systems provide the only military access to denied

EMPLOYMENT OF SPACE ASSETS BY MILITARY



AS OF 1 JANUARY 1984

CHART V-2

areas. The NCA and US military forces depend heavily upon space systems in peacetime, crisis, and conflict. The importance of the military use of space and the capabilities of space systems have provided the impetus for study of command arrangements that would further integrate military space systems into the US military command structure.

Space Missions

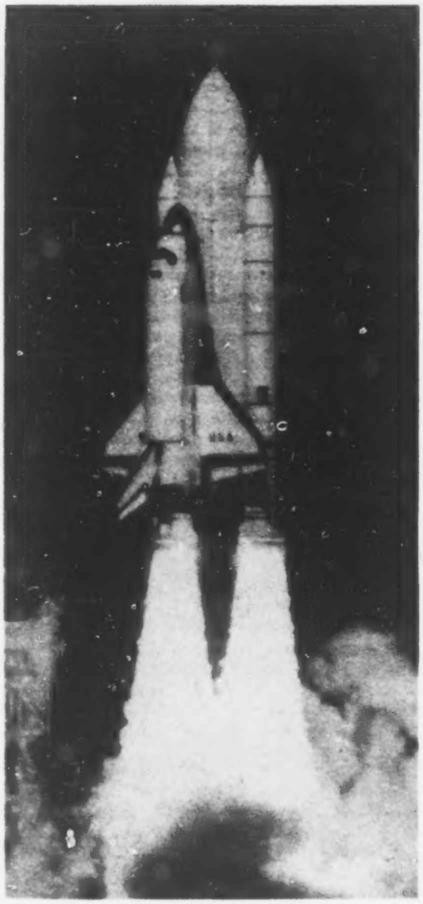
Both the United States and the Soviet Union are becoming more dependent on space systems for critical operational support. Emerging technologies should provide an increased capability for deterrence and greater freedom of action in space. Future space systems that could be deployed have the potential to perform a variety of active defense missions.

The United States must ensure that US space assets can function in a hostile environment. This ability will depend on the introduction of an antisatellite (ASAT) system consisting of weapons launched by aircraft, a surveillance system, and a command and control system, which will be key to the development of required defense capabilities in space in the near term.

Support Missions

Support missions directly contribute to operational capabilities. These missions include communications and terrestrial surveillance; navigation and positioning; mapping, charting, and geodesy; and search and rescue. The Defense Satellite Communications System, Military Strategic and Tactical Relay System, Defense Meteorological Satellite Program, Satellite Early Warning System, Global Positioning System, and Nuclear Detonation Detection System are being developed or are operationally performing these support functions.

Other support missions include prelaunch preparations and activities involved with deploying and sustaining space systems. Systems being developed for such missions include a Consolidated Space Operations Center, Inertial Upper Stage, CENTAUR Upper Stage and ground facilities for the Space Shuttle. In addition, data systems are being modernized at the Satellite Control Facility.



SPACE SHUTTLE COLUMBIA

Soviet Space Efforts

Although the Soviets lag the United States in many important areas of space technology, they continue vigorous efforts in this field. In recent years, the Soviet's annual space budget growth rate of 15 percent has exceeded their overall military budget growth rate. Most of their space effort is purely military, with much of the remainder being joint civil-military programs. The Soviets have developed a substantial logistical base, which includes active launch pads, mission control sites, and space support ships. The Soviets also have a significant production capability and large inventory of satellites and launch vehicles, which provide them a capability to place large numbers of satellites in orbit quickly. This capability has allowed the Soviets to sustain an average annual launch rate of more than 100 satellites during the past few years (Chart V-3). Part of the difference in launch rates between the United States and the Soviet Union can be explained by the longer average lifetime of US satellites. In recent years, however, the Soviets have made significant technical advances in their satellite programs.

The USSR has achieved a two-to-one advantage over the United States in manned space days in space programs. The Soviets have already demonstrated a number of the capabilities needed to support a permanently manned space station. Research and development, reconnaissance, operation of weapons and sensors, and other military missions could be performed from such stations. The introduction of a Soviet reusable manned orbital ferry vehicle is expected by the late 1980s. The United States launched such a vehicle in 1981.

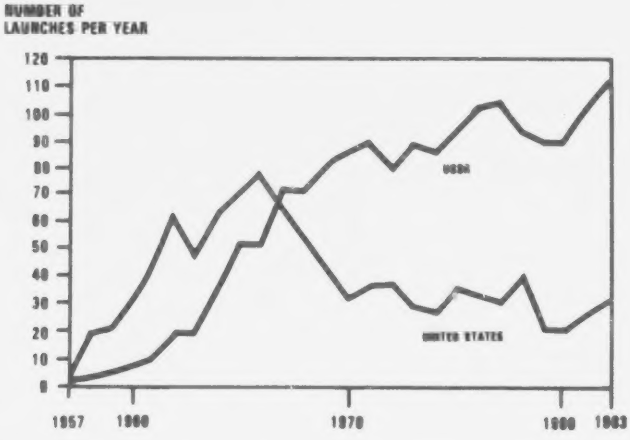
Some Soviet space assets pose a threat to US satellites and ground forces. The Soviet operational coorbital antisatellite system is designed to engage low-altitude satellites. Additionally, their ABM and ICBM systems have an inherent ASAT capability which could augment the coorbital system. Some US satellites may also be vulnerable to interference from jammers or damage from ground-based systems.

Soviet space systems have potential application during crises and situations short of general nuclear war, because they provide command authorities with order of battle, warning, target location, and battle damage assessment information.

Command Arrangements

The Soviet emphasis on space as a warfighting medium and the increasing US reliance on space systems have caused the United States to reevaluate the military command structure supporting space operations. In

COMPARISON OF US AND SOVIET ANNUAL SPACE LAUNCHES



AS OF 1 JANUARY 1984

CHART V-3

1982, the Air Force formed the Space Command to consolidate its operational space activities. The Navy established the Naval Space Command in 1983. These two commands could provide the initial components of a structure to support a new unified command for space. A Joint Planning Staff for Space is being established to improve overall military planning for space operations.

SECURITY ASSISTANCE

Security assistance programs contribute to US objectives by assisting allies and friends to meet their own defense needs. This assistance is an essential element of foreign policy and is vital to collective defense. By sharing costs and effort, many countries can achieve a level of mutual security unattainable through independent efforts. Security assistance programs also serve as an economy-of-force measure and allow the United States to concentrate its available forces in the areas of greatest threat. For these reasons, security assistance is an integral part of US global military strategy.

Security Assistance Objectives

The primary objectives of security assistance are to assist countries in preserving their independence; promote regional security; help obtain access, overflight, transit, and forward basing rights; contribute to interoperability among military forces; insure access to critical raw materials; and provide a medium for increasing US influence.

Elements of Security Assistance

Security assistance refers to the Foreign Military Sales program (FMS), which includes FMS Credit Financing (FMSCR); the Military Assistance Program (MAP); and the International Military Education and Training Program (IMETP).

Foreign Military Sales and Credit Financing

Foreign military sales allow qualified governments to purchase defense equipment, services, and training from the United States on a cash basis. The FMSCR Program furnishes direct credit to recipient countries for such purchases. Eighty-six percent of the Administration's proposed FY 1985 security assistance budget is allocated to FMSCR.

The Military Assistance Program

The United States has had few programs as cost effective as MAP. This grant program provides an established account that designated countries may use to obtain defense equipment and selected services. The United States benefits from strengthened relations as well as increased deterrent and defensive capabilities in recipient countries. The Administration's FY 1985 MAP proposal of $800 million represents 13 percent of the total security assistance program budget request and an increase of 57 percent over 1984. This increase will allow the United States to assist certain needy countries more effectively in improving their security and their contribution to the collective defense.

REGIONAL MILITARY TRAINING CENTER
HONDURAS

The International Military Education and Training Program

The IMETP provides training to foreign military and certain civilians on a grant basis. IMETP training, conducted primarily in the continental United States, consists of formal courses, orientation tours, and on-the-job training. This program has great potential for influencing foreign governments, whose representatives are trained by US personnel and exposed to the United States, its people, culture, and policies. Frequently, students later assume senior leadership and management roles in their governments. The FY 1985 IMETP proposal represents approximately one percent of the total security assistance program. Chart V-4 depicts past expenditures and a summary of the number of students who have attended US military-sponsored training under the IMETP. This program enhances collective defense at relatively low cost to the United States by providing urgently required training to foreign forces.

Security Assistance Initiatives

Over the past few years legislative initiatives have been introduced to revitalize the security assistance program. These initiatives were designed to provide more flexibility in planning, production, and delivery, and thus allow the United States to be more responsive to nations suddenly threatened by overt hostilities, e.g., Lebanon and El Salvador. One such initiative is the Special Defense Acquisition Fund (SDAF). The SDAF was introduced to respond to anticipated future FMS needs and to order in advance high-demand items that have long-lead-time procurement schedules. Although the SDAF is receiving less funding than requested, it has shortened the time needed to replace Service inventories reduced through unforeseen diversions.

Although the proposed FY 1985 security assistance budget is less than that expended in FY 1984 (Chart V-5), it does recommend increases of 18 percent in IMETP and 57 percent in MAP over the FY 1984 levels. The security assistance budget request reflects a more balanced consideration of the needs of friends and allies and US objectives than in previous years (Chart V-6).

WORLDWIDE IMETP EXPENDITURES

STUDENTS TRAINED IN US

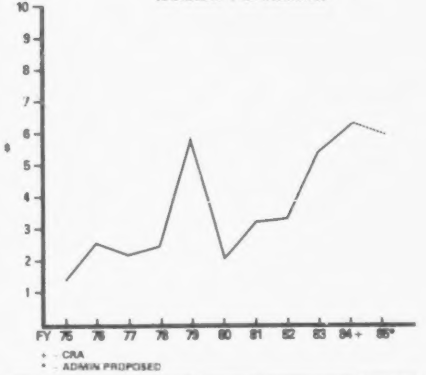
FY	EXPENDITURES* (IN MILLIONS)	STUDENTS TRAINED	COST PER STUDENT
76	$27.5	7010	$3923
77	25.5	4858	5249
78	29.2	4429	6593
79	26.6	3772	7052
80	24.8	3545	6996
81	28.7	4836	5935
82	46.2	6317	7314
83	46.0	6861	6705

* ACTUAL DOLLARS/NOT ADJUSTED FOR INFLATION

AS OF 1 JANUARY 1984 CHART V-4

SECURITY ASSISTANCE BUDGET

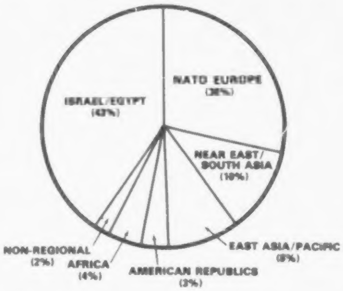
(CURRENT $ IN BILLIONS)



AS OF 1 JANUARY 1984 CHART V-5

SECURITY ASSISTANCE BUDGET*

FY 1985 ADMINISTRATION PROPOSED STRATEGIC APPORTIONMENT



* FMS, IMET AND MAP

AS OF 1 JANUARY 1984 CHART V-6

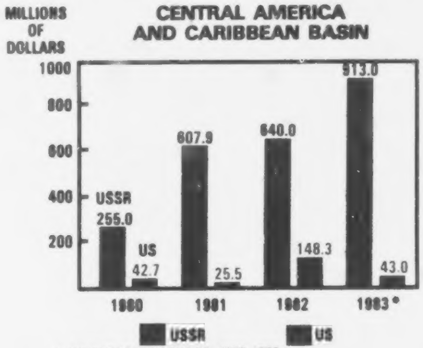
Soviet Security Assistance

Weapons transfers continue to be an increasingly important Soviet means of projecting influence. Since 1964, Soviet arms sales agreements with the Third

World have totaled about $30 billion, over half of this total after 1976. Soviet arms agreements are directed toward disrupting regional stability. Recipients often have been attracted by favorable financial terms, quick delivery, and, in some cases, advanced weaponry. In recent years, the sale of military equipment has become an increasing source of hard currency for the Soviet Union. Soviet weapons transfers in several instances have provided a means of acquiring base access rights abroad. Weapons transfers also provide entree for Soviet advisors into recipients' military establishments, allowing them to exert influence over local leaders and policies through control of spare parts, training, and the sale of newer equipment.

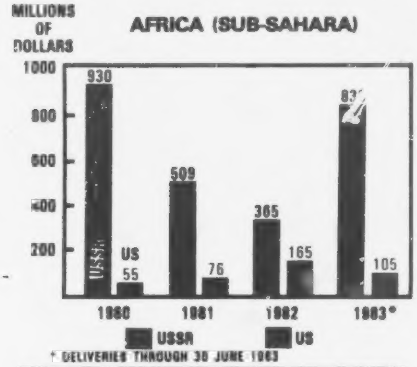
Since 1955, over 63,000 military personnel from the less-developed countries have been trained in the Soviet Union and Eastern Europe. In 1982, approximately 20,000 Soviet and East European noncombat military personnel were stationed in nearly 40 non-Warsaw Pact countries (excluding Afghanistan and Cuba), where they played a central role in organizing, training, and influencing client armed forces.

The Soviets have significantly increased their security assistance efforts in Central America and the Caribbean Basin (Chart V-7) and Sub-Saharan Africa (Chart V-8). Additionally, the Soviets view the Middle East and northern Africa (Chart V-9) as a region of great strategic



* DELIVERIES THROUGH 30 JUNE 1983

AS OF 1 JANUARY 1984 CHART V-7

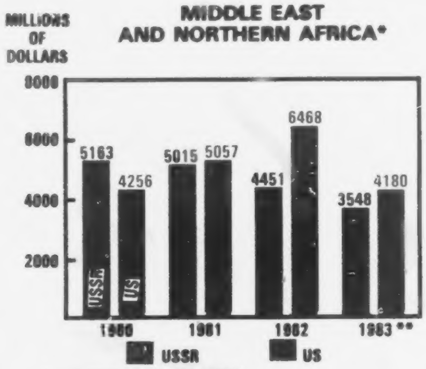


* DELIVERIES THROUGH 30 JUNE 1983

AS OF 1 JANUARY 1984 CHART V-8

importance and have maintained an especially high level of security assistance in that region. These charts depict Soviet security assistance deliveries in these regions and compare them with US programs.

MIDDLE EAST AND NORTHERN AFRICA*



* INCLUDES ISRAEL AND EGYPT
** DELIVERIES THROUGH 30 JUNE 1983

AS OF 1 JANUARY 1984 *CHART V-9*

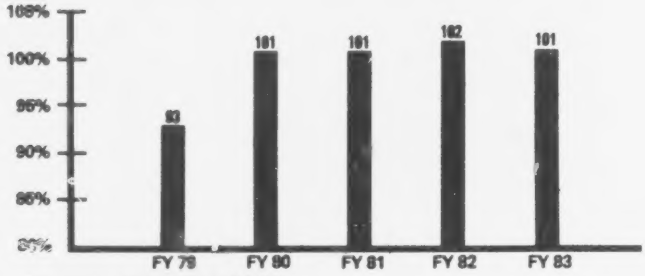
DEFENSE MANPOWER

Overview

People are the foundation of the US military posture. Careful attention must be paid to manpower concerns to maintain the US force structure at the highest possible level of readiness and support the modest expansion needed.

Since 1980, all Services have continued their success in achieving recruiting objectives (Chart V-10). The Services are also meeting or exceeding basic congressional

DOD RECRUITING
(% OF OBJECTIVE ACHIEVED*)

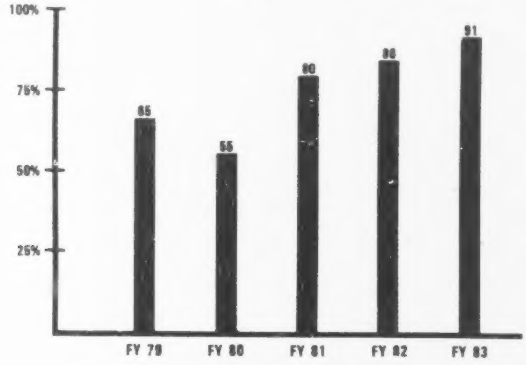


* ALL SERVICES (PRIOR AND NON-PRIOR SERVICE)

AS OF 1 JANUARY 1984 *CHART V-10*

quality control standards for accessions. The trend in recruiting high school graduates is shown in Chart V-11. Additionally, the retention of quality, mid-career enlisted supervisors and technicians has improved. The Services are currently competing successfully with the civilian sector. Chart V-12 shows trends in retention. The recruiting and retention of quality people are essential to maintaining required force levels. Incentive programs

HIGH SCHOOL GRADUATES*
(ALL SERVICES)

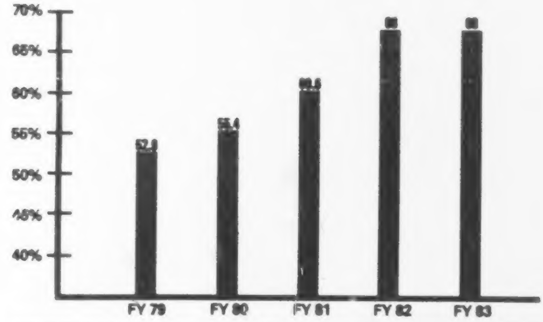


* NON-PRIOR SERVICE

AS OF 1 JANUARY 1984

CHART V-11

DOD TOTAL REENLISTMENT
(% OF ELIGIBLES)



AS OF 1 JANUARY 1984

CHART V-12

are essential to maintain the long-term economic security of servicemembers, and attention will have to be paid to such programs as pay comparability, retired and retainer pay, quality health care, commissary facilities, family support and acceptable living and working conditions.

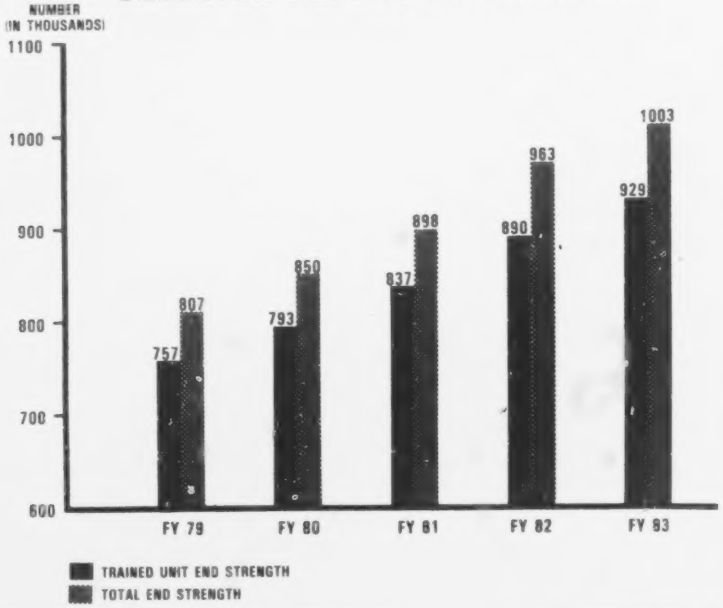
Since 1973, entry into military service has been entirely voluntary. The momentum of success in recruiting and retention under voluntary acquisition may be threatened by a number of factors. An improved economy, with an attendant reduction in the unemployment rate, could have a negative effect upon accessions and retention. Moreover, the population of males 18 years of age will decline by nearly 15 percent over the next eight years. This reduced manpower pool will make force expansion more difficult because competition for qualified manpower will increase between the military and the private sector.

Selected Reserve

The primary element of the Reserve forces is the part organized and trained as units, the Selected Reserve (SELRES). The SELRES also includes some personnel preassigned to augment active units upon mobilization. Organizationally, the SELRES includes the Army National Guard, Army Reserve, Naval Reserve, Marine Corps Reserve, Air National Guard, and Air Force Reserve.

The decline in SELRES strength that began in 1973 has now been reversed. The current trend, as shown in Chart V-13, is expected to continue through FY 1989. Several factors have contributed to this turnaround, including the significant increases in military pay in 1980 and 1981, introduction of enlistment and reenlistment incentives, assignment of full-time recruiters and support personnel with the SELRES, increased advertising, and improvements in reserve personnel management.

SELECTED RESERVE MANPOWER



AS OF 1 JANUARY 1984

CHART V-13

An important but less tangible factor in this change has been the favorable reversal in national attitudes toward the military.

Individual Ready Reserve

In the event of a major war, the Services must have an immediate supply of trained personnel. The Individual Ready Reserve (IRR) is the most important source of pretrained manpower for such an emergency. IRR personnel would be used to bring active and SELRES units to full strength and replace casualties in the early months of combat. The strength of the IRR reached a high of 1,229,000 in FY 1973, but dropped to a low of 356,000 in FY 1978. This decrease was due to several factors, but primarily the reduction in the size of the active force that occurred after Vietnam, which reduced the number of people entering the IRR with a military service obligation. Following that drawdown, increased retention in the active force and SELRES further contributed to the decline. This manpower pool had increased only slightly to 417,000 at the end of FY 1983.

Since the IRR has no established manning level, the need for additional IRR personnel can be determined only after all sources of trained military manpower have been matched against wartime requirements. The shortfall is difficult to predict since it would depend on the intensity and scope of a conflict. As a positive step toward reducing a potential shortfall, Congress recently enacted legislation authorizing the Services to extend the military service obligation from six to eight years and establish IRR bonus programs. An increase in active force and SELRES manning, periodic refresher training for IRR personnel, and an appropriation for the IRR bonus authorization are still required.

Civilian Employees

Civilians perform a major share of the support functions within DOD. Only about four percent work in management headquarters; the remainder are employed in activities such as supply and repair depots, shipyards, communication centers, base operations, and medical care facilities. As of September 1983, the number of direct-hire civilians employed in support of DOD military functions was 903,644, down from 1,030,965 in FY 1973. As a result of congressional limits on the number of civilians in DOD, and other policies, civilian growth between FY 1985 and FY 1989 is expected to be only 5,300, approximately 12,700 below the level necessary to support the projected force structure. Shortages in civilian manpower degrade equipment and supply readiness and adversely affect living conditions for military personnel. These shortages inevitably lead to the assignment of military personnel to jobs that could be performed efficiently by civilians, unnecessarily diverting servicemembers from military tasks.

The competition for talent in the marketplace will make retention of senior civilian managers, procurement specialists, engineers, scientists, and others with technical skills increasingly difficult. Pay and benefits that are comparable to the private sector must be established to insure that vital civilian employees are retained.

Compensation

As the quality of the force improves, the marketability of its members also increases; therefore, the costs of maintaining quality and experienced personnel will increase. Servicemembers are the key to readiness, and unless these costs are paid, gains made in force quality and readiness may significantly decline.

Long-term economic stability is of paramount concern to servicemembers. Therefore, compensation must provide sufficient incentive to insure that desired retention levels are maintained. Proper compensation starts with pay comparability, an objective achieved in 1972, but not maintained. Comparability of military pay levels can be achieved most effectively by a direct link to a pay adjustment mechanism, such as the Employment Cost Index. This linkage would provide improved economic predictability and stability for servicemembers. The absence of this stability and the corresponding erosion of pay levels result in strong disincentives for long-term commitment to the armed forces. Losses are most acute among highly skilled personnel and critical supervisors. Retention of such personnel will require additional compensation in the form of bonuses and special pay in order to be competitive with the employment market.

Related compensation issues such as health care and commissaries affect servicemembers and their families. The value of these programs to morale and retention in the short-term is known; their long-term value must not be underestimated.

Retention

The military retired and retainer pay system continues to be a powerful retention mechanism. This system functions as a force management tool by providing the proper mix of youth and experience, while supporting an up-or-out promotion system. Further, this system provides a mobilization base of experienced personnel, under national obligation, to support the national military strategy, and serves as an offset for sacrifices inherent in a military career. Great care must be taken in evaluating proposals to change the military pay system. Proposals must give recognition to the potential impact on the objectives of the system, the economic security of servicemembers, and the true cost of the system in light of the alternatives.

Facilities maintenance, military construction, family housing, family support, and full reimbursement for the expenses of government-directed travel and moves are programs critical to the retention of quality people in the armed forces. Although such programs take into account incidental, but cumulative, details of service life, retention ultimately depends on the sensing of all servicemembers that they are engaged in challenging activities which make a difference, and that sacrifices incurred are fully appreciated by the nation.

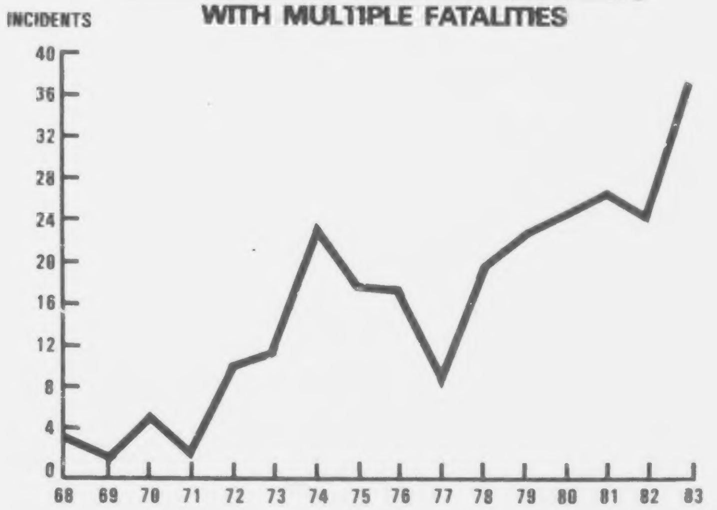
INTERNATIONAL TERRORISM

Violence used to either shock or intimidate is an increasing problem for both US national security and the world community. Although US interests in Europe and the Middle East have often been targeted by terrorists, the threat of terrorism is increasing worldwide. Today, the threat from international terrorism to US citizens and property has never been greater.

More than 50 percent of all recorded international terrorist events have been directed against US interests — mostly against the official US presence overseas. During the past decade, a terrorist event was directed against US officials or installations abroad approximately once every 17 days.

International terrorism has been steadily increasing since official statistics were first compiled in 1968 (Chart V-14). More than 8,000 significant incidents of terrorism have occurred since 1968; almost 8,300 individuals have been wounded and nearly 4,000 killed. The 1983 bombings of the US Embassy and Marine Headquarters in Lebanon, and the bombings of the US Embassy and airport in Kuwait, illustrated the vastly increased destructiveness of modern terrorism resulting from relatively simple means and techniques.

INTERNATIONAL TERRORIST INCIDENTS WITH MULTIPLE FATALITIES



AS OF 1 JANUARY 1984

CHART V-14

Future terrorism will likely be more frequent and more lethal. Terrorists may employ more sophisticated weapons and tactics. State support for wars of national liberation and international terrorist organizations will be of special concern. Support from the Soviet Union, North Korea, Cuba, and their allies, and the provision of financial aid, weapons, and training from Syria, Iran, Libya, and the Peoples Democratic Republic of Yemen will likely continue. Terrorists may or may not be centrally controlled by their patrons. Regardless, the instability they create in the industrialized West and Third World nations undermines the security interests of the United States and its allies.

The US Armed Forces have undertaken major efforts to assist in combating the terrorist threat. The United States and its allies are attempting to identify and prevent terrorist attacks before they occur by sharing intelligence information from a variety of sources. Important steps have also been taken to increase command and individual awareness of the terrorist threat. Active measures also are being devised to preclude suspected terrorist activity, and actions are underway to reduce personnel and installation vulnerabilities to minimize the potential for terrorist success.

PEACEKEEPING OPERATIONS IN THE MIDDLE EAST

The United States participates in several activities in the Middle East designed to contribute to the peaceful resolution of conflict. These operations include the Multinational Force (MNF) in Lebanon, the Multinational Force and Observers (MFO) in the Sinai, and the United Nations Truce Supervision Organization (UNTSO).

Multinational Force

In 1982, the Government of Lebanon (GOL) asked the United States, France, and Italy to send forces to Beirut to help establish a stable, secure environment in Beirut which would allow the GOL to extend its legitimate authority within the sovereign territory of Lebanon. An element from the United Kingdom later joined the force. US participation in the MNF supports such US objectives as removal of all foreign forces from Lebanon, extension of GOL authority throughout Lebanon, and the guarantee of security for Israel's northern border.

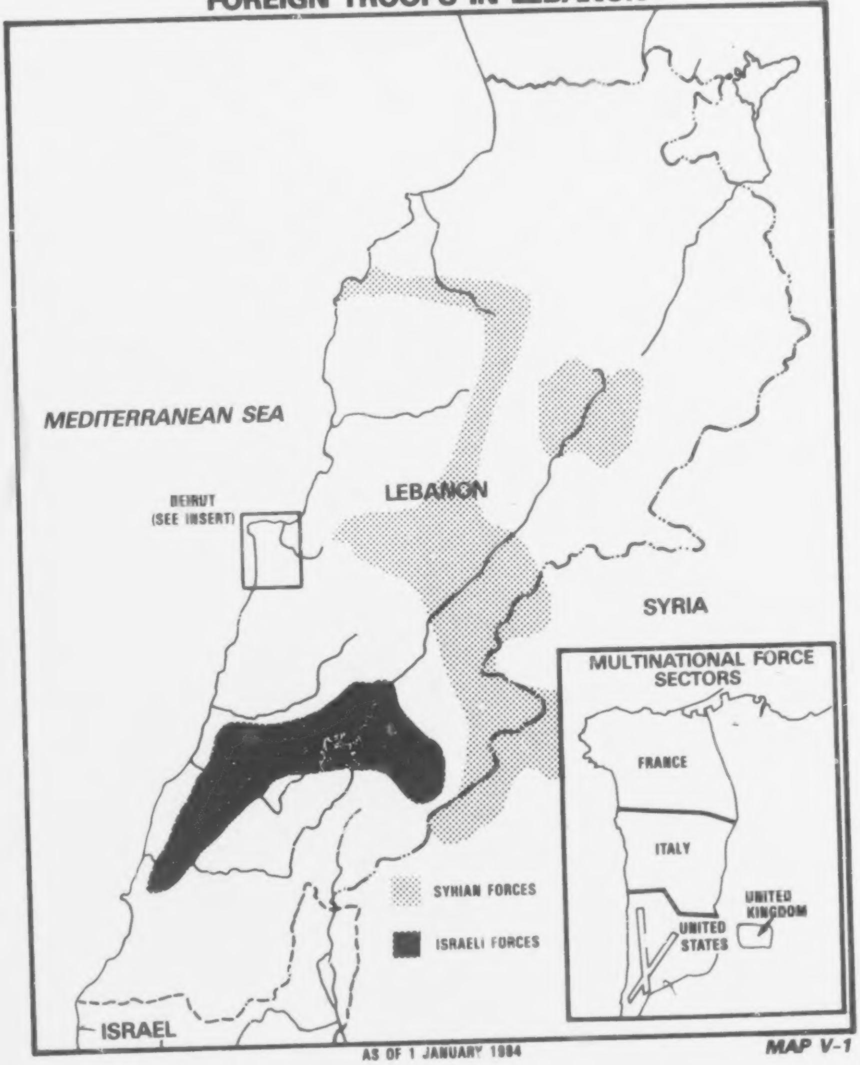
In September 1982, the US contingent of the MNF entered Lebanon and occupied positions in the vicinity of the Beirut International Airport (Map V-1). The MNF's role is one of an interposition force, and it has been directed to follow peacetime rules of engagement. The concept of operations calls for the MNF to report violations of security to Lebanese authorities who are to take necessary action. The USMNF is authorized to take only the necessary action to assure its own safety. The US element of the MNF consists of a Marine Amphibious Unit of about 2,000 personnel and supporting ships off the coast of Lebanon. Approximately 30 US Army personnel man counter-battery radars as part of this operation. Since September 1982, the number of US personnel ashore has ranged from 1,200 to 1,800.

Multinational Force and Observers

The 1979 Egyptian-Israeli Peace Treaty envisioned that the UN would extend the mandate for peacekeeping forces then in the Sinai to oversee the treaty's security provisions. In light of the inability of the UN to provide for the Sinai mission, a protocol was added to the treaty which established the MFO in 1982. The MFO's mission is to supervise implementation of the treaty annex on security arrangements and employ its best efforts to prevent violation of the treaty's terms.

The MFO is a 2,500-man force composed of three infantry battalions; logistical support, aviation, coastal patrol, and communications elements; and civilian observers. The United States contributes an infantry battalion, a logistics unit, and civilian observers. Fiji, Colombia, Uruguay, Australia, New Zealand, France, Italy, The Netherlands, and the United Kingdom also provide contingents. Norway currently provides the force commander and his personal staff.

FOREIGN TROOPS IN LEBANON

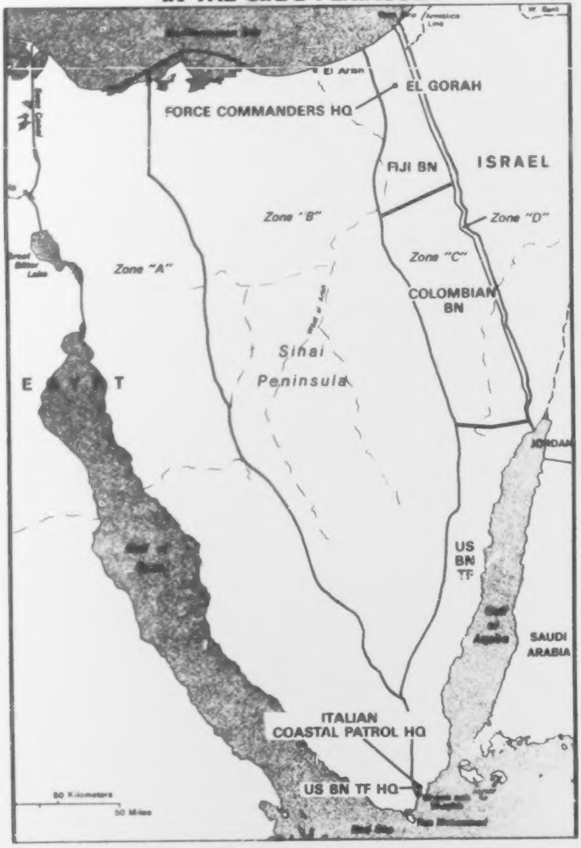

MEDITERRANEAN SEA
BEIRUT (SEE INSERT)
LEBANON
SYRIA
MULTINATIONAL FORCE SECTORS
FRANCE
ITALY
UNITED KINGDOM
UNITED STATES
SYRIAN FORCES
ISRAELI FORCES
ISRAEL

AS OF 1 JANUARY 1984

MAP V-1

The Protocol to the Egyptian-Israeli Treaty divided the Sinai into four zones (Map V-2). Egyptian forces and installations are located in Zones A and B, Israeli forces and installations in Zone D. The MFO operates checkpoints, observation posts, and reconnaissance patrols in Zone C, and insures freedom of navigation through the Strait of Tiran. The MFO also provides verification of authorized forces and installations in all zones. No termination date has been set for the MFO, but participation by US forces is subject to yearly review by Congress.

MULTINATIONAL FORCE AND OBSERVERS IN THE SINAI PENINSULA


Armistice Line
W. Bank
El Arish
EL GORAH
FORCE COMMANDERS HQ
FIJI BN
ISRAEL
Zone "B"
Zone "D"
Zone "A"
Zone "C"
COLOMBIAN BN
Sinai Peninsula
EGYPT
JORDAN
US BN TF
SAUDI ARABIA
ITALIAN COASTAL PATROL HQ
US BN TF HQ
50 Kilometers
50 Miles

AS OF 1 JANUARY 1984

MAP V-2

UN Truce Supervision Organization

The United States has participated in UNTSO since its inception. Since November 1973, the United States has provided 36 military personnel to UNTSO, a peacekeeping organization in the Middle East consisting of 298 unarmed military observers. UNTSO was organized to maintain the cease-fire ordered by the UN Security Council in 1948 and to supervise the General Armistice Agreements of 1949 among Jordan, Syria, Egypt, Lebanon, and Israel. UNTSO serves as the focal point for all UN Middle East peacekeeping operations and has an indefinite mandate.

HUMANITARIAN ASSISTANCE

During 1983, the JCS coordinated numerous operations to support humanitarian assistance missions throughout the world. The assistance was varied and included the reimbursable deployment of such diverse assets as National Guard firefighting-equipped aircraft to Italy; communications equipment and support personnel to cyclone-ravaged Fiji; naval and air elements to assist in the Korean Airline (KAL 007) search; a Navy construction battalion, well-drilling equipment, and support personnel to combat a drought in Costa Rica; electrical power generators to Haiti; and general support to Turkey and Colombia after earthquakes struck those countries. These are just a few examples of peacetime military support provided to friends and allies during times of human crisis and need.

THE OPERATION IN GRENADA

The United States joined in the military operation in Grenada in response to an urgent request by the Organization of Eastern Caribbean States (OECS), Jamaica, and Barbados for cooperation and assistance. The Caribbean Peace Force (CPF), with contingents from Jamaica, Barbados, Antigua, Dominica, Saint Lucia, and Saint Vincent commenced operations in late October 1983.

Prompt military action was required because of the collapse of governmental institutions and public order in Grenada following the murder of Grenada's Prime Minister and several cabinet members. Stability on the island was further threatened by a shoot-on-sight 24-hour curfew imposed by the Revolutionary Military Council and the strong likelihood of a further, violent internal power struggle. There were also reports that remaining government members had been murdered. The situation endangered US citizens and other foreign nationals on the island and represented an unprecedented threat to the peace and security of the Eastern Caribbean region.

The objectives of the CPF were and continue to be the restoration of peace and public order to Grenada, assurance of the safety of US citizens and other foreigners, and the evacuation of those who wished to leave. The CPF were also to help the people of Grenada reestablish governmental institutions so that the peacekeeping force could be withdrawn from the island as soon as possible.

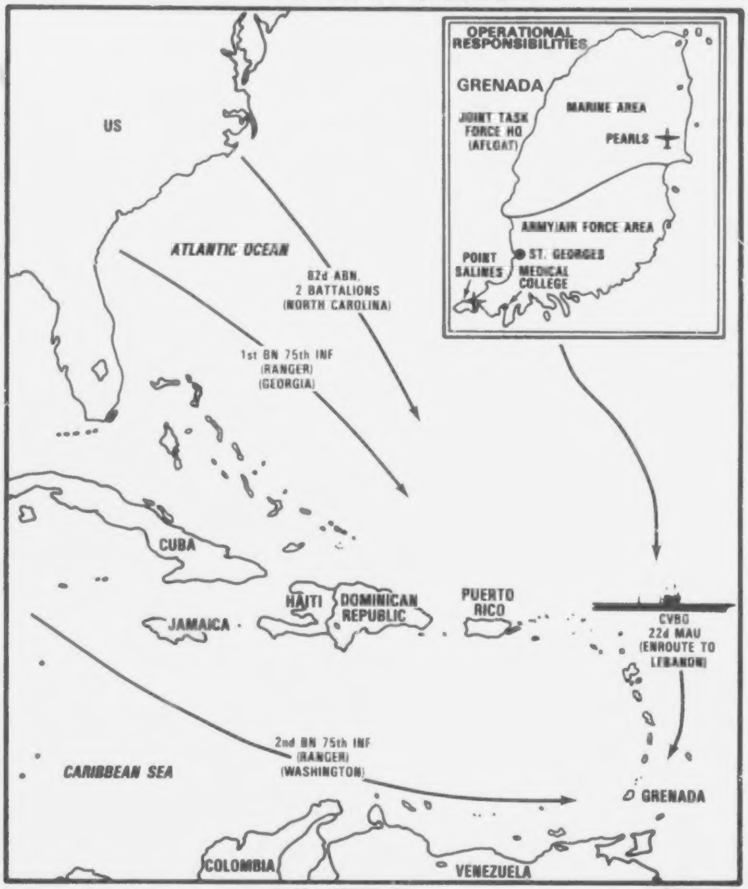
The operation demonstrated the US capability to react rapidly and deploy forces in response to a contingency. Reserve as well as active duty forces responded in this total force effort. Map V-3 depicts key features of the operation.

US forces were met by a well-organized, centrally commanded and controlled military force. Cuban soldiers and workers, organized into military units, formed the backbone of the resistance. The reason for the resistance became evident as operations progressed. Cuban military units had secretly established fortifications for Cuban use only, large arms caches, training centers, and military communications facilities. These activities undercut Cuba's contention that it was only in Grenada to help construct an airport for Grenada's tourist industry and indicated broader Cuban intentions.

US SERVICEMAN IN GRENADA

The Governor-General of Grenada, who assumed executive authority of the island, has established a provisional government. This interim government is working with the OECS to restore the public institutions which will permit withdrawal of the forces sent to restore order.

US OPERATION IN GRENADA


OPERATIONAL RESPONSIBILITIES
GRENADA
JOINT TASK FORCE HQ (AFLOAT)
MARINE AREA
PEARLS
ARMY/AIR FORCE AREA
POINT SALINES
ST. GEORGES
MEDICAL COLLEGE
US
ATLANTIC OCEAN
82d ABN. 2 BATTALIONS (NORTH CAROLINA)
1st BN 75th INF (RANGER) (GEORGIA)
CUBA
HAITI
DOMINICAN REPUBLIC
PUERTO RICO
JAMAICA
CVBG 22d MAU (ENROUTE TO LEBANON)
2nd BN 75th INF (RANGER) (WASHINGTON)
CARIBBEAN SEA
GRENADA
COLOMBIA
VENEZUELA

AS OF 1 JANUARY 1984

MAP V-3

US Government representatives are working with Grenadian authorities and representatives of other nations to assure the safety and welfare of the people of Grenada. US assistance has been provided to help rebuild the Grenadian economy and security forces. US military doctors and corpsmen are providing much-needed medical care. Additionally, the United States is providing military equipment and training to Caribbean island nations participating in the CPF so that they can more effectively provide for public security in Grenada.

GLOSSARY

AAA – antiaircraft artillery
AAW – antiair warfare
ABM – antiballistic missile
AEGIS – US Navy AAW weapon system
AFAP – artillery-fired atomic projectiles
AFSATCOM – Air Force Satellite Communications System
ALCM – air-launched cruise missile
AMRAAM – advanced medium-range air-to-air missile
AN/FPS-85 – long-range phased-array radar
AN/FSS-7 – SLBM detection and warning radar
ANMCC – Alternate National Military Command Center
ANZUS – Australia, New Zealand, and United States
APC – armored personnel carrier
ARTY – artillery
ASAT – antisatellite
ASW – antisubmarine warfare
AT – antitank
ATB – advanced technology bomber
ATG – Antitank Gun
ATGM – antitank guided missile
ATGW – antitank guided weapon
AWACS – Airborne Warning and Control System
BMEWS – Ballistic Missile Early Warning System
BMP – amphibious armored infantry combat vehicle
C^3 – command, control, and communications
C^3CM – command, control, and communications countermeasures
CBAC – combat brigade air cavalry
CBU – cluster bomb unit
CD – Conference on Disarmament
CDE – Conference on Disarmament in Europe
CEP – circular error probable
CGS – CONUS Ground Station
CINCs – commanders in chief of the unified and specified commands
COBRA DANE – space surveillance sensor
CONUS – continental United States
CPF – Caribbean Peace Force
CRAF – Civil Reserve Air Fleet
CSCE – Conference on Security and Cooperation in Europe
CTB – comprehensive test ban
CV – conventionally-powered aircraft carrier
CVBG – aircraft carrier battle group
CVHG – guided missile/VSTOL aircraft carrier (Soviet)
CVN – nuclear-powered aircraft carrier
CW – chemical warfare
DCA – dual-capable aircraft
DCS – Defense Communications System
DEW – distant early warning
DOD – Department of Defense
DSCS – Defense Satellite Communications System
DSP – Defense Support Program
ECCM – electronic counter-countermeasures

ECM — electronic countermeasures
EMP — electromagnetic pulse
EW — electronic warfare
FMS — foreign military sales
FMSCR — Foreign Military Sales Credit Financing
FY — fiscal year
GLCM — ground-launched cruise missile
GNP — gross national product
GOL — Government of Lebanon
GPF — general purpose forces
HARM — high-speed antiradiation missile
HTKP — hard-target kill potential
ICBM — intercontinental ballistic missile
IMETP — International Military Education and Training Program
INF — intermediate-range nuclear forces
IR — infrared
IRR — Individual Ready Reserve
JCS — Joint Chiefs of Staff
JDS — Joint Deployment System
JEWC — Joint Electronic Warfare Center
JOPES — Joint Operation Planning and Execution System
JSOA — Joint Special Operations Agency
JSTARS — Joint Surveillance and Target Attack Radar System
JTTP — joint tactics, techniques, and procedures
JVX — advanced vertical lift aircraft
km — kilometers
kt — kilotons
LANTIRN — low-altitude navigation and targeting infrared system for night
LAV — light armored vehicle
LCAC — air-cushion landing craft
LOC(s) — line(s) of communication
LRINF — longer-range intermediate-range nuclear forces
LVT — landing vehicle tracked
MAC — Military Airlift Command
MAF — Marine Amphibious Force
MALS — miniature air-launched system
MAP — Military Assistance Program
MBFR — mutual and balanced force reductions
MEECN — Minimum Essential Emergency Communications Network
MFO — Multinational Force and Observers
MILSTAR — communications satellite
MIRV — multiple, independently targetable reentry vehicle
MLRS — Multiple-Launch Rocket System
mm — millimeter
MNF — Multinational Force
MOR — mortars
MPF — multipurpose facility
MPS — maritime pre-positioning ship
MRL — multiple rocket launcher
MRLS — Mobile Rocket Launcher System
MSC — Military Sealift Command
mt — metric ton, megaton
NATO — North Atlantic Treaty Organization
NBC — nuclear, biological, chemical

NCA — National Command Authorities
NDRF — National Defense Reserve Fleet
NEACP — National Emergency Airborne Command Post
NCMC — NORAD Cheyenne Mountain Complex
nm — nautical miles
NMCC — National Military Command Center
NMCS — National Military Command System
NORAD — North American Aerospace Defense Command
NSNF — nonstrategic nuclear forces
NTPF — Near-Term Pre-Positioning Force
OGS — overseas ground station
OTH-B — over-the-horizon backscatter
OECS — Organization of Eastern Caribbean States
PACAF — Pacific Air Force
PARCS — Perimeter Acquisition Radar Attack Characterization System
PAVE PAWS — phased-array missile warning system
PLO — Palestine Liberation Organization
PLSS — Precision Location Strike System
POL — Petroleum, oils, and lubricants
POMCUS — pre-positioning of materiel configured to unit sets
psi — pounds per square inch
PSYOP — psychological operations
PWRMS — pre-positioned war reserve materiel stocks
RDT&E — research, development, test and evaluation
RMTC — Regional Military Training Center
ROK — Republic of Korea
RRF — Ready Reserve Force
SAC — Strategic Air Command
SAM — surface-to-air missile
SDAF — Special Defense Acquisition Fund
SELRES — Selected Reserve
SINCGARS — single channel ground-airborne radio system
SLBM — submarine-launched ballistic missile
SLEP — Service Life Extension Program
SLOC(s) — sea line(s) of communication
SNA — Soviet Naval Aviation
SNDV — strategic nuclear delivery vehicles
SNF — short-range nuclear forces
SOF — special operations forces
SP — self propelled
SPS — simplified processing station
SRINF — shorter-range intermediate-range nuclear forces
SSBN — nuclear-powered ballistic missile submarine
SSGN — nuclear-powered guided missile attack submarine
SSN — nuclear-powered attack submarine
START — Strategic Arms Reduction Talks
TEL — transporter-erector-launcher
TFW — tactical fighter wing
TLAM(N) — TOMAHAWK Land Attack Cruise Missile (Nuclear)
TOW — tube-launched, optically tracked, wire-guided missile
TW/AA — tactical warning and attack assessment
UK — United Kingdom
UN — United Nations
UNTSO — UN Truce Supervision Organization

USCENTCOM – United States Central Command
USEUCOM – United States European Command
USLANTCOM – United States Atlantic Command
USPACOM – United States Pacific Command
USREDCOM – United States Readiness Command
USSOUTHCOM – United States Southern Command
USSR – Union of Soviet Socialist Republics
VSTOL – vertical short takeoff and landing
VTOL – vertical takeoff and landing
WP – Warsaw Pact
WWMCCS – Worldwide Military Command and Control System

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